DOCUMENT RESUME

ED 087 853	CE 000 686

AUTHOR	Morgan, Margaret K., Ed.; Filson, Dolores, Ed.
TITLE	Whither Education for Health Care Delivery. A Florida Approach.
INSTITUTION	Florida Univ., Gainesville. Center for Allied Health Instructional Personnel.
PUB DATE	Sep 73
NOTE	156p.; Proceedings of a conference held May 3-4, 1973
AVAILABLE FROM	Center for Allied Health Instructional Personnel, Norman Hall, Univ. of Florida, Gainesville, Florida 32611 ($3.00; 25 or more, $2.75)
EDRS PRICE	MF-$0.75 HC Not Available from EDRS.
DESCRIPTORS	Community Colleges; Conference Reports; *Health Occupations; *Health Occupations Education; *Health Personnel; *Interinstitutional Cooperation; Universities

ABSTRACT

The conference summarized in this monograph grew out of two expressed concerns of health care personnel educators: their desire for more information about future trends in health care delivery, and their desire for better articulation of the various levels of programs preparing health related personnel. Papers presented include these: Future Trends in Health Care Delivery, by Joseph Hamburg; Health Maintenance: Uncharted Territories for Health Professions, by J. Warren Perry; Some Future Directions in Health Manpower in Florida, by Edmund F. Ackell; Selection of Health Manpower: One Possible Solution, by Mary H. McCaulley and Margaret K. Morgan; The Allied Health Curriculum: Where Does It Start and Where Does It Stop? by Moses S. Koch; and Health Care Delivery and Education for Health Careers: A Complex Relationship, by Robert E. Kinsinger. Several papers and discussions center around community college-university cooperative efforts. A summary of problems, issues, and concerns is also presented. (SC)

ED 087893

DEC 28 1973

Whither Education for Health Care Delivery

A Florida Approach

Edited by
Margaret K. Morgan
and
Dolores M. Filson

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL BY MICRO FICHE ONLY HAS BEEN GRANTED BY
Margaret K. Morgan
Center for AHIP
TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER

A Publication of

The Center for Allied Health Instructional Personnel

Gainesville, Florida
September, 1973

CE 000 686

WHITHER EDUCATION FOR HEALTH CARE DELIVERY

A FLORIDA APPROACH

Edited by

Margaret K. Morgan
and
Dolores M. Filson

Proceedings of a Conference
Held in Gainesville, Florida
May 3-4, 1973

sponsored by

The Center for Allied Health Instructional Personnel
University of Florida

and

The American Association of Community
and Junior Colleges
Washington, D.C.

in collaboration with

The Commonwealth Fund

and

The W. K. Kellogg Foundation

A Publication of
The Center for Allied Health Instructional Personnel

Gainesville, Florida
September, 1973

CONTENTS

Introduction 1

SETTING THE STAGE

Darrel Mase, presiding
Future Trends in Health Care Delivery / Joseph Hamburg . . . 3

Comments 12

Health Maintenance: Unchartered Territories for the Health Professions / J. Warren Perry 21

Comments 27

Albert A. Canfield, presiding
Some Future Directions of Health Manpower in Florida / Edmund F. Ackell 30

Comments 42

Selection of Health Manpower: One Possible Solution / Mary E. McCaulley and Margaret K. Morgan . . 46

The Allied Health Curriculum: Where Does It Start and Where Does It Stop? / Moses S. Koch 61

Comments 75

Participants' Concerns and Suggested Solutions: A Bill of Particulars / Albert A. Canfield, presiding 79

Coordinative Conferences for Allied Health Programs Kenneth G. Skaggs, presiding 84

Health Care Delivery and Education for Health Careers: A Complex Relationship / Robert E. Kinsinger 87

Comments 101

A COMMUNITY COLLEGE-UNIVERSITY COOPERATIVE EFFORT
James L. Wattenbarger, presiding 103

The College of Education as a Resource
Bert L. Sharp 105

The College of Health Related Professions as a Resource
Howard K. Suzuki 113

Comments 118

The Community Colleges as Resource Centers
James L. Wattenbarger, presiding 121

Panelists:
Paul W. Graham 124

Nancy M. Hartley 127

Albert B. Smith III 130

Comments 135

A Suggestion for Change / Albert A. Canfield 137

THE ISSUES AND OBJECTIVES / Margaret K. Morgan 141

Participants 148

Acknowledgements 152

INTRODUCTION

The conference summarized in this monograph grew out of two expressed concerns:

Educators of health care personnel desire

(a) more information about future trends in health care delivery, and

(b) better articulation of the various levels of programs preparing health related personnel.

At a meeting of Florida educators considering the establishment of a program to prepare health occupations teachers, a health manpower specialist said, "We not only don't know whether we need educators of health care personnel; we don't even know whether we need health manpower. We don't know the direction health care delivery is going in the future. We don't even know the right questions to ask to determine the direction of the future."

The staff of the Center for Allied Health Instructional Personnel (CAHIP) shared his concerns and determined to identify some of the questions, and perhaps even a few answers.

At the time the CAHIP staff was pondering a means of identifying the questions, the Association of Community and Junior Colleges, and The Commonwealth Fund, through the efforts of Kenneth G. Skaggs, were seeking means through which the various segments of the educational community preparing health related personnel could serve as resources to each other. They were especially interested in ways community junior colleges and universities can augment the resources of each other.

Mr. Skaggs and the CAHIP staff agreed that a logical reactor group would be allied health leaders from community junior colleges of north central Florida and from the University of Florida, with the thought that questions and problems which that group might pinpoint would be pertinent not only to other Florida communities but to other parts of the country as well.

Thus a conference was arranged for May 3 and 4 in Gainesville, Florida, with the hope that from it would come an effective plan for inter-institutional cooperation.

Papers delivered at the conference, some audience reactions, an identification of issues and questions, and an outline of the approach Floridians will be taking to resolve the issues and answer the questions are found on the following pages.

Conferees are identified at the end of the monograph.

Gainesville, Fla.
September, 1973

Margaret K. Morgan
Director
Center for Allied Health
Instructional Personnel

FUTURE TRENDS IN HEALTH CARE DELIVERY

Joseph Hamburg, M.D.
Dean, College of Allied Health Professions
University of Kentucky

On the surface it would appear masochistic that anyone in these tempestuous and mercurial times would attempt to prognosticate the future of health care delivery -- if not masochistic, then at least rash and imprudent.

To indicate just how injudicious such forecasting can be, let's turn back to 1963 and ask how many of us would have then predicted that

(1) Concern for environmental pollution would have had the impact which it presently has on our economic and cultural development.

(2) Family planning would have taken hold with such force that by 1972 we would approach the "population zero" equilibrium.

(3) A drug culture would have developed to the extent that it has, with its profound effect on our young people.

(4) The so-called crisis in the shortage of health manpower is rapidly nearing an end -- at least as far as total numbers are concerned.

© Joseph Hamburg 1973

(5) Comprehensive health planning on a state- or nationwide level would become an established and accepted procedure.

As a soothsayer, I failed to predict any one of these events. With that track record, I come to you today to say some sooth about future trends in health care delivery.

Rather than make any bold and brash predictions on what will be, however, I would probably be less embarrassed in the future if I now consider what in my view needs to be done in the realm of health care delivery and make some guesses at which of these have a fair chance of being accomplished in the waning years of our *fin de siêcle*.

The needs seem to break down into four general areas:

First, health care must be made more comprehensive. Comprehensiveness must include much larger elements of preventive care than it has heretofore and must also provide for the necessary orientation and education of both the public and the profession which this changing focus will require.

Second, the delivery of comprehensive health care has to be of a consistency and constancy that eliminate its present variability. This implies a system, or at least a more logical organization than presently exists.

Third, such care must be readily available and reasonably accessible to all patients. Whatever his geographic location, each citizen should have reasonable access to the same consistent quality and comprehensiveness of care which is available to all.

And, fourth and finally, the cost of such care must be financed in a fashion which makes it affordable to all, without excessive burden or risk.

When will such a millenium be with us? The obvious answer is never. How rapidly will we approach this nirvana? Here speculation and conjecture take over. I believe that the rate at which we approach this millenium will be directly proportional to the speed with which our nation adopts a plan for pre-paying its health care professionals for future services rendered. Conversely, the longer we persist in our spotty and many times inequitable distribution of fees-for-services rendered the longer the delay.

Let no one assume or infer from this statement that I am proposing a National Health Service or even necessarily compulsory federal health insurance. I believe much of what needs to be done could be accomplished by properly motivated private and voluntary health organizations -- existing or new. We have some evidence that supports this opinion.

Allow me a moment of digression.

A pre-paid health care plan in which total care would be provided in return for one set annual fee would put a premium on wellness rather than illness. There is a folktale which alleges that in ancient China the physician was paid only while the patient was well -- that the physician's payments were halted when the patient under his care became ill and did not resume until the patient was well again.

Whether or not this tale is real or apocryphal is unknown, but it represents a remarkable sensitivity to the nature of man.

Those existing pre-paid health care organizations such as Kaiser Permanente and HIP [New York's Health Insurance Plan] have demonstrated the effectiveness and efficiency which can be obtained through an organized approach to health care delivery. They certainly are not providing the comprehensive care which we all seek, but they are a beginning.

Recognizing the special characteristics of the patient population they serve, we still note the level of care they can provide with a physician/patient ratio of 1:1000 as opposed to that which we provide nationally with our ratio of 1:780 .

Now, if I may, let me return to the four areas of need and touch upon the last mentioned first: the cost of health care. I believe that before this decade is over we will all be covered by some form of health insurance, most likely by a combination of private insurers, with the government providing insurance subsidies for certain population groups and for treating the more costly and chronic diseases. This coverage will necessarily still be provided as payment to health professionals on the "usual and customary" fee-for-service basis. There will, however, be increasing utilization of built-in incentives to lower the premiums for clients (I hate that word, but I know nothing else to call the non-sick) who seek to maintain their health, and bonuses such as tax benefits for health systems or professions which seek to do likewise. Such incentive plans will not become overnight reality, but will be part of a slow evolutionary process.

The third area of need, equal accessibility to care regardless of a patient's geographical location, is a problem which will continue to confound us all. Such availability problems will not be a function of the total numbers of health care personnel, but rather their distribution. Not only are our personnel inequitably distributed geographically, but the types and levels of responsibilities within our existing disciplines are also maldistributed.

Before this decade is over we will see incentive plans designed to lure students into certain professions, and, in turn, professionals into certain underserved areas. Incentives will take such configurations as:

(1) Loans or outright scholarships to students entering certain disciplines.

(2) Loan forgiveness to those serving in geographical areas of demonstrated need.

(3) Salary supplementation or tax benefits to those professionals or groups located in underserved or less desirable locations. Salary supplementation may take the form of state or local special subsidy.

(4) We must not underemphasize the lure of well-designed health care centers which will offer teams of professionals an opportunity for fulfillment of the needs which originally attracted them to one of the health professions. One caveat -- merely providing an attractive and well-equipped health care center does not guarantee that the center will immediately attract a physician. The Sears Roebuck Foundation, for example, spent a great deal of time, effort, and funds in setting up such units in a variety of situations, mostly in rural sections of the country. The centers have not had the kinds of attractiveness their planners had hoped they would have. Many units, fully equipped, stand empty in some regions of the country. However, if such a unit has well-established and identifiable communication linkages with other academic and health service elements and permits its professionals to feel themselves an integral part of such a network rather than a mere isolate, then in my view it has a much better chance at success.

(5) Finally, and as a last resort, we may see under special circumstances some type of conscription for certain categories of health personnel in whose absence the health and welfare of a community would otherwise be threatened.

These comments lead directly to the second point: the need to develop a more systematic approach to health care delivery. Here again, I do not see a revolutionary trend toward formal organization, much less a nationalized health care system. Rather, I would guess we will see a pluralistic system emerge. Privately owned group practices of medicine will increase in numbers, size, and complexity. They will expand both the types and the depth of services presently offered. This change will in turn have great implications for the allied health professions as well as for the newer physician extender personnel. Further, we will see both labor unions and industry increasingly render health care to their members and employees not merely by providing insurance funds but also by establishing health care centers.

Government-sponsored or subsidized health maintenance organizations also will increase. They will function (1) as demonstrations of what their approach can offer in the way of providing care and (2) as providers of the care necessary in some of the underserved areas. In my view, and contrary to most opinion, hospitals, except in isolated areas, will diminish in importance as major foci for the delivery of health care. Hospitals by their nature are designed to deliver secondary and tertiary care and are almost completely unsuited to be more than tangentially involved in the thrust for primary health care, which is today's discerned critical need. Again, please do not infer that I consider hospitals anachronistic, unnecessary, or counterproductive. My statement relates merely to their future role in comprehensive health care.

And this brings me full circle to the first area of need -- to true comprehensive health care with emphasis not on disease treatment but on prevention. I am most pessimistic about the speed with which we shall see this evolve in our nation. Having spent the last ten years in an academic health science center, I must truthfully admit that, except for token lip service, I have seen no major effect emerge from the limited attempts to inculcate into any of our students the obvious logic of preventive health care. The efforts by some of our institutions' departments of community health are still looked upon with disdain and spoken of with derision by most of my clinical colleagues. Change in this parameter will occur very slowly, and then, I am afraid, only in response to the continuing external pressures which will eventually force change upon our disoriented faculties and their institutions.

Advances in the health education of our citizens will most likely result from the efforts of the communications media rather than from those of individual practitioners. A recent poll conducted in the Chicago area for the Blue Plans revealed that the majority of people still obtain most of their health information, albeit inaccurate, from the communications media. Little information comes from health practitioners themselves and, in light of the above observations, there is not much likelihood that this tendency will reverse itself in the near future. Consequently, it becomes critical for those health professionals and others seeking to improve the client's capability for self-care or preventive care to use the media.

In summary then and as much as I hate to end on a gloomy note, I believe that true comprehensive care for our nation will be very slow in coming.

Universal health insurance will be a reality in the near future. We will see the gradual development of a number of pre-paid health care plans, some private, some government-sponsored, but most of them assuming the total care responsibilities for a given subscriber or population group. These will begin to involve a growing number of health related professionals who will in turn become increasingly more responsible for providing many elements of care presently rendered by physicians and dentists.

Maldistribution of health care personnel will continue to plague us, and some of the above-mentioned remedial actions will occur.

Finally, let me emphasize again that the movement toward true comprehensive health care will be accelerated only when the present fee-for-service arrangement is replaced with a satisfactory contractual pre-paid plan.

COMMENTS

Darrel Mase

What the delivery of health care is to become must be built into the curricula of the various health careers for which you are responsible. This has not been done. If we are not careful we may turn out people who are not ready to go to work. I have said for some time that I would rather go with estimates of what appears will happen than on what is happening or has happened, because I know that what has occurred in the past is not what the future will be like.

We must somehow get the best solid data we can collect and the clearest description of what is to be. Because I was so convinced of this need, when I retired as dean I chose to go into the Division of Health Systems Research at the University of Florida, looking for answers to the question of what the delivery of health care is probably going to be. I hope we will have some data from models that are being developed. We can feed in data on the Health Maintenance Organizations (HMO's), if that is the direction we are going, or on group practice, to try to provide information for decision-making in health care delivery, including predictions on manpower needs and on the kinds of curricula that are needed.

Kenneth Skaggs

There is a possibility that in the future in many places the hospital will not be as important as a health care center as it now is. In many meetings I have attended in recent months, I have been hearing, "We must begin to develop personnel for the care of ambulatory patients," or for out-patients, or for the kind of preventive care you have been talking about, Dean Hamburg. This brings me back to our allied health programs. What kind of needs do you foresee? What kind of allied health worker is going to be the person for the ambulatory care, the out-of-institution patient care? In our junior colleges we are preparing -- at least for the most part -- institutional personnel. What kind of person should we be preparing and how do you see this as affecting modification of the curriculum?

Joseph Hamburg

How many days do I have? In one sentence, I don't know. I do know this: That the preparation of health care personnel who are out to deliver primary care carried on in a secondary or tertiary care institution is the antithesis of what needs to be done. Someone facetiously said that 90 percent of our health professionals are being prepared in an environment in which only 10 percent of them will serve. Now, hospitals are critically important places for our system. I'm not disposing of them and I'm not eliminating them. They will continue to be a training ground for many health professionals in the future. But I would suggest or predict that we will see more and more of the clinical training of some of our health professionals move out of hospital environments and into neighborhood health centers, into OUTREACH programs, into HMO organizations as we develop the kinds of personnel our citizens need for their care.

I'm not very popular when I say this, but I believe 80 percent of what is done in health care today -- primary health care -- can be done just as well if not better by people less trained than the physician. And so I think there is an enormous potential for health care personnel to pick up some of the skills presently designated only to the physician and the dentist. I see most allied health professionals expanding their roles and responsibilities in that direction, and I don't believe that can be done in a hospital environment.

I haven't answered your question because I can't.

Warren Perry

The United States has a fantastic way, rather than using what it has, of creating something new. That is what we have done in the proliferation of adding new titles and going on to create more new health careers. I think one thing we have to do is retrain and learn how to utilize what we already have. I think where we start is by retraining through continuing and in-service education or other means, for these new roles. We're always looking at ways of adding new titles and we have done a lot of this. Much of it is very *important as we redefine goals and jobs. But we need to retrain those we already have. Certainly that retraining is going to be a big job, in the future. This is particularly true in the allied health professions when persons in those fields are the ones being earmarked for important roles in the future.*

Darrel Mase

I would just like to say that I think you are wrong in your training programs if you are now training people to do what has been done in the past. What you need to do is to train people with the idea that this is what they are "going to begin to start to commence to do." When things change, your people must be ready to change and to be retrained to do those new kinds of things. Community colleges, colleges and universities have only known how to phase in and up, to develop more programs with more students, more students, more students. We never learn how to phase down and out, but that's what we have got to learn how to do. We must teach students when they are with us that what they are learning is going to be right for awhile, but maybe they will need to shift to something else. We must make education general enough that the shift is natural.

Norma Fisher

I'm in physical therapy and I've just returned from West Virginia where I heard from physical therapists that their problem is not getting students or graduates into the rural areas. Their problem is finding enough rural areas for these students to go to, because this seems to be what the students want to do. They were brought up in rural areas and want to return there. Do you feel there is a possibility of educating students who come from urban areas to the rural way of life, so that they may want to accept that way of life? If so, how do you feel we can finance the necessary transportation, and other support for getting to that area while maintaining contact at the medical center where we teach, where our physicians are, where our materials are?

Joseph Hamburg

Everyone always tries to count on morality and a sense of commitment to move people out into underserved areas, but no one ever tries money. We are a capitalistic system and all of us, as altruistic as we may be, respond to money. Now if you want students in East Armpit, Tennessee, pay them. Pay professionals an incentive to work there and they will come out. I think this attempt to try to lure city people into the rural communities is doomed. There will be a certain group that will want to go there because of the attractiveness of certain selected rural areas, but there are other areas -- rural parts of West Virginia and Kentucky -- that are not attractive. You can paint them, but they still stink. Now you either get the people out of there or you get a system organized that forms a mosaic that penetrates into there with a rotating kind of surface commitment to that particular area and at the same time you try to improve the living conditions of that vicinity. But if you depend on somebody from lower Manhattan, you're going to waste a lot of energy trying to attract the few disciples or those with angelical zeal, into those areas. I don't think it can be done. I think you could succeed in some cases, but it's going to be a very frustrating effort.

Albert Canfield

I wanted to ask Dean Perry a question for elaboration. The question of continued educational experience called retraining is becoming a massive concern to many groups. I don't think this is what you are saying, but I'd like to ask: Are you saying that what we need to do is to bring the nurses in more often and give them more nursing, bring the physical therapists in more often and give more P.T. things, and then tend to live with the system structure we now have?

Warren Perry

No. Not at all. To me the continuing education of the future is going to be on two levels. I don't think we can cross off the great importance of bringing in and giving to each individual health professional the changes in his own field. But I think we are going to see much, much more interdisciplinary continuing *education: we bring teams of people into OUTREACH areas to look at community health problems together. Continuing education can happen in clinical settings; there is no question about it. Some of the most unique continuing education projects I've had the privilege of being involved in have happened in rural areas. Let's have continuing education projects out there and in little community hospitals. We took a continuing education group to an Indian reservation. We had quite a time, talking with the people and finding problems in the social part of health care in this setting which we did not know existed. I think we're going to see a lot of this.*

The real hope is going to be in the interdisciplinary part of continuing education as together we look at different ways of working with new systems in new areas. We cannot disregard, however, that right down the line, practically all of our health fields today at all levels look to continuing education as a continuing way of certification in their own fields. That will continue, so I think it will not be one or the other, but probably both.

Darrel Mase

While we look at continuing education, let's look at one other thing. That is, it's going to get much bigger than "getting ready to begin to start to commence." Because of accountability and because accountability is going to be increasingly with us, I hope we are not going to bring people to meetings like we used to. I hope we'll use technological developments such as cassettes and closed-circuit television and all the technology that took us to the moon. Look at your curricula to see whether you have to go as far to get people ready to "begin to commence," or whether, with the continuing education that's going to be a part of an on-going program because of accountability, maybe we as well as medicine can come back on the length of some of our curricula.

Polly Brown

Dr. Hamburg, I'm an occupational therapist and my present research in occupational therapy suggests that the value of economic return is *the lowest value contributing to the satisfaction of these personnel in their jobs and in their careers. I'm wondering if perhaps there might be other incentives which would be more conducive to persistence in primarily female occupations.*

Joseph Hamburg

Yes. I think there are. I've probably stressed finances more than I should. What we are talking about, I hope, is a network of continuing things that lure the professional into a particular career in the first place. We get very attractive students in all of our programs. Allied health, nursing, dentistry, medicine. They are brought in not only with the lure of the buck; they are sincerely interested in the science -- in the natural sciences -- as well as the social sciences. They are interested in cultural change, in developing their own personalities and their own depths of knowledge. We give them fine libraries; we try to present them with the best kinds of faculties. We give them a milieu for learning, for continuing, for probing, for meeting educational challenges. Then we give them a certificate and we say, "Now, you've had all this. Go out there and do it by yourself." Without the back-up support. Isolated from the culture in which they developed, which they expanded, which they grew in, which they need! And that is not fair! It is unreasonable, it is illogical!! So what we have got to do is present these little OUTREACH things with not just pockets of care, but connected units of a total system so that there is a continuing intercourse and communication and relationship with their colleagues. We need to prove they are not out by themselves. That is, I think, what we need to do. And I'm afraid that is what is going to be so very long in coming.

Comment

You spoke of preventive medicine.

Joseph Hamburg

My strategy -- not mine but the strategy I propose as one approach -- is that if you come to me as a purveyor of care, and you say, OK, Joe, you've got Warren and Darrel to take care of and we're going to give you $1,000 a year each for their care, regardless of how sick they get, regardless of how well they stay. Now you want to have your leisure to go out to the golf course or on your boat or to play backgammon. The money that you get from each of these will remain constant regardless of their levels of wellness or illness. In that case I think I will try much harder to keep these men healthy because now I've got a built-in incentive. There are other kinds of approaches that will encourage this. But as long as I gain profit by his illness, I have no real reason except a moral one to try to keep this person well. And I'm not condemning physicians as being immoral. Physicians are people, and we respond to the same kinds of things that other people respond to. I think what we have got to do is make wellness attractive, financially.

Darrel Mase

You've got to remember, too, that in our educational programs, in medicine or any other areas, we have not talked prevention and well-being. We've taken care of disease, disability, catastrophic conditions.

Joseph Hamburg

Well, if you consider these to be attractive! Undulant fever in a patient is an attractive thing to a questioning scientist. The fact that Darrel doesn't succumb to cancer of the lung because he doesn't smoke is not dramatic. How can you get a one-hour television show out of the fact that he is still alive?

Comment

I tend to confirm what Dr. Hamburg says. The distribution of Schweitzers seems to me to be pretty prima-facie evidence to the economic interest of having people ill. I don't think there is any real question about it.

Frank Palmieri

Back to realism. The real problem today is the operation that we face. As community college educators, developers of curricula and programs to develop immediate, employable persons, we face licensing, certification problems. We have all kinds of real organizations, from the AMA to any one that you want to name in the allied health professions. If you want to start a program in anything, you've got to get backing to get somebody certified to do some kind of job!

Dean Mase

Because somebody is protecting his vested interests in that area?

Frank Palmieri

Everyone has his little thing, his specialty. I'm amazed at what the community colleges can do. Where are we? How can we even begin to think about developing curricula? In what area? With whose backing? And if we train somebody, how are we going to retrain them? What are we going to do with all these nurses we have? We can give them a little continuing education such as refresher work; we can give them something on supervisory development. We can send them out to the various agencies that we have in town and instead of sending them to the hospital for some clinical experience, we can send them to the health department or some of the other agencies in town, which we have been doing. And some of them have been getting jobs in other areas instead of the hospital. Now, speak in some real terms!

Joseph Hamburg

I think you have to agree with me, that it is going to be slow. Now let me ask you a question. What have you done personally to challenge the system? I'll tell you what we're doing. Our dental hygienists are being taught to cut and fill hard tissue, in complete defiance of the state law that prohibits this and in total and utter defiance of the Kentucky Dental Association that resists us. OK? There is no certification for these people. There is no statutory authority for what they are doing, but we consider that you've to create the model before anybody can employ it. Who would employ a physician's assistant today if *we were still theorizing? Now what are you doing at your community college level to force the process of change? I refuse to continue to accept the business of dragging the straw man in to accept that "these people won't let me do it!" or that "society has laws against it." We can, as colleges and universities, as supposed agents of change, do something to force change.*

HEALTH MAINTENANCE: UNCHARTED TERRITORIES FOR THE HEALTH PROFESSIONS

J. Warren Perry, Ph.D.
Dean, School of Health Related Professions
State University of New York at Buffalo

When asked if I would discuss the concept of "health maintenance," I agreed that, since so little effort had been given to clearly defining the purposes of HMO's, I would be glad to speak to "Health Maintenance: Uncharted Territories for the Health Professions."

Much of my own relationship with the health maintenance concept has come from my experience with the presentation of a national conference at State University of New York at Buffalo on "Health Maintenance: Challenge for Allied Health Professions."

The health planners who helped to develop the concept of health maintenance and assisted in drafting the legislation for health maintenance organizations had lofty goals for the provision of health care services for everyone. The idea of a continuum of health services had been proposed in public health philosophy for years, but even casual critics of the national health scene could discern that the meager attempts to implement other than acute and intensive care services were, in the main, fragmentary and ineffective. Thus once again, the total, comprehensive health needs were restated in the concept of health maintenance as a spectrum of environmental control, disease prevention and detection, acute and intensive care, and rehabilitation and extended care services. To provide such a coordinated national health program, it was postulated that the health professions needed to assess the role and responsibilities each would have to assume independently and inter-professionally, if the services promised by the health maintenance concept were to be achieved.

To maintain health in this comprehensive sense involves the three major components of (1) treatment of illness and disability, (2) prevention of new diseases through early and regular detection, and (3) primary prevention through personal and environmental controls such as immunizations, proper diets, avoidance of smoking, alcohol, drugs, and accident prevention. A single component is not sufficient unto itself. All are interrelated, and together, they result in a system of health maintenance.

While planning the SUNY conference, we discovered that all previous health maintenance conferences had focused on pre-payment policies, definition of a geographic area for inclusion in an HMO, and effects of such a system on the providers of health care. Practically no time had been spent emphasizing the quality of health services that could be expected from such a maintenance plan.

National persons were brought to Buffalo to represent the ten health fields of dental assisting, dental hygiene, dietetics, medical records administration, medical technology, occupational therapy, physical therapy, radiologic technology, respiratory therapy, and rehabilitation counseling. In addition, key speeches were presented to the one hundred participants by important representatives of medicine, dentistry, nursing, and consumer interests.

From the standpoint of comprehensive health care, the hallmark of the health maintenance concept, it has been disappointing to see that initial proposals for implementation have been little more than medical group practice of acute and intensive care for a specific clientele. Attention to environmental, prevention, detection, and extended care emphases are almost entirely lacking.

Thus, a major recommendation of this conference was that, along with medicine, allied health and nursing must spell out the important roles, both clinically and educationally, which will be needed to embrace this stated emphasis of the 1972 health program.

Dr. Edmund Pellegrino, keynoting the Buffalo conference, stated, "Non-physicians of several types are ideally suited to provide the various services that constitute health maintenance. It has already been demonstrated that non-physicians can handle most of the personal and technical aspects of screening and detection. Application of health maintenance on a national basis is probably most dependent upon the rapid training of non-physician personnel. The task of educating personnel for the major roles in health maintenance will fall to the schools of allied health in collaboration with medical schools."

Of one thing the participants at this conference were certain: Until educational programs for the health professions change to include prevention and extended care as a part of their on-going curricula, changing the system of health care in such a manner that these activities are understood and appreciated by health professionals will be impossible. (Any person who wishes to have a more careful look at the reports for both the discipline groups and the interdisciplinary groups at this conference can obtain one of the reports by writing to my office.)

Those of us there assembled felt that we were on the frontiers of planning, and although we were realistic that it would be years before many of the ideas we shared might reach fruition, it was a worthwhile and productive experience to discuss the potential of the health maintenance concept and the ways in which educational programs of the future in each of the allied health disciplines need to change to respond to these ideas.

What does this mean to representatives of the community/junior college programs at this meeting today? I would ask this question: In what ways are your own curricula attempting to reflect in your didactic and clinical programs some of the newer approaches to health care delivery, and in turn, in what ways do these innovations relate to health maintenance concepts?

Together, consortia of educational programs at all levels must be willing to look at nontraditional health service areas and settings in which more emphasis will be given in the future. Away from the traditional ivory towers of educational institutions we must look at the possibilities of clinical education in rural health settings, in out-patient care programs, in the developing emergency health care programs, in settings such as nursing homes and extended care facilities. These are only a few of the kinds of clinical experiences that need to be assessed by every program at any level of education to see the potential they might have for student education.

Today one can hear critical comments about the over-production of health workers at various levels. I am not convinced, myself, that this is true, but I am certain that we do not have a record of accountability of graduates. How many of you know right now of the placement of numbers of your students that have received jobs in their training field, have advanced to further education, are without employment? Any business other than education would have excellent studies of the results of its products, but we in education feel we are above this kind of accountability. The regional meetings sponsored by the American Association of State Colleges and Universities, represented at this meeting by Dr. Mel Koch, are emphasizing careful state studies of the need for health manpower based upon rational assessment of the demands of the health care system. What kind of business can continue to receive millions of dollars more each year to develop its product without knowing the results of what that product is doing today?

Representatives of the health curricula at institutions at all levels must make a vital effort to be involved in health planning efforts in each state. But that effort will be just that much more effective if representatives of the various educational programs in health manpower areas are brought together in meetings such as this.

It is a pleasure to have been able to share these ideas with you today. We will be watching to see concrete results of this attempt to bring about closer communication between and within the educational institutions and health planning agencies in Florida.

COMMENTS

Wilfred Wagner

You say change is simple, but we can't even change the conference. Here we are, with nine sessions, one devoted to solving the problems, and eight listening to what the problems are! We are pretty well aware of what the problem is!

Warren Perry

If the consumers here are the people who will determine that they really want to move into some concerted action, I think you would have to talk to Dr. Morgan in terms of the direction you might go. But I agree with you as to the interchange that takes place at a conference. It should not be just us here speaking to you, but we should be talking together about what you can do in your own area.

Moses Koch

You may be interested to know that the National Institutes of Health (NIH) is doing just what I think you are proposing; that is, running some conferences that are action-oriented. They bring together for two and one-half days representatives of the states -- not just educators but health planners and health care planners -- to deliberate and go back to their states with a plan. Some people who never met before begin to work together, so some things are going on.

Warren Perry

I agree with you both and to tie these two together: I had the privilege of working with Dr. Koch and of sharing a conference with him at Albany with people from New Jersey and New York State. We got action going at that one -- together. The action became so specific that I have been asked to go with four other people to see the Commissioner of the New York State Department of Education. We're going to discuss these same areas. It takes that kind of togetherness, and I agree with you.

Darrel Mase

Warren, I think one of these days we have to get beyond discussing and philosophizing and get around to doing, then change as we learn, as we move along. I'm with you on this, but I still question how much conferences ever accomplish. That shows my age, doesn't it?

Nancy Hartley

I keep hearing the words "professionalism," "profession," "accreditation." The junior college educator plays a unique role and has a different responsibility from that of the university educator. One gentleman said his community has more nurses than can be utilized. Is there a shortage of nurses in our community? No. How do we know? Not by looking at the state statistics, or regional or national statistics. We did our own study. We can do a certain amount, and there is much more we can do in coordination with universities. My question is, in relation to the emphases on the professional and the university role, how much responsibility do we in technical programs have? Where do we in the community college get our leadership?

Joseph Hamburg

Don't misinterpret our term "professional" to imply a higher level of educational background. Professional as we use it refers to someone who has great knowledge and skill about his tasks. That can be laundry, typing, janitorial services. The professional doesn't have to be a research biologist. He has great expertise about his particular task and has a dedication to that task that subrogates his own personal needs for the interest of the patient. That is what I mean by professionalism. Don't tell me that can't be done in a Vo Ed institution or in a community college. It may exist there, perhaps in greater strength than it does in some of the major universities.

Warren Perry

I think your point about leadership in technical programs is well taken. Look at the whole area of emergency health care. Recent interest in it is great. But who's teaching emergency health care? Who's working with the ambulance drivers? Who's doing these kinds of *things? Some of the older health related professions have been involved, but much emergency health care has been taught in health departments. Having seen several of these programs, I can say they are not being handled well. The technical training needs to be provided by people who know how to put such programs together. The Johnson Foundation has just put $15 million into emergency health care. Its project is going to be a major movement. And the emphasis in this project is going to be technical.*

We in our college have a very close working relationship with six community colleges. Transferability of credit, because we are a part of a university system, is automatic and completely acceptable into all of our baccalaureate programs. It cannot be any other way. And transfer is going on. But in terms of roles that need to be looked at from the technical level, I think the problem becomes one of definition. We need to spell out specifically what the roles are. Your point is a good one.

SOME FUTURE DIRECTIONS IN HEALTH MANPOWER IN FLORIDA

Edmund F. Ackell, D.M.D., M.D.
Vice-President for Health Affairs
University of Florida

I am here today, not only by being involved in a health center, in deciding on programs needed for the future, but also because I have had the fortunate or unfortunate experience of being asked to serve as chairman of the statewide committee now looking at Florida's health manpower needs.

The problem we face is one thrust upon us by the public; that is, the public's insistence on health care as a basic right. For years, when health care was not available, it was assumed we simply did not have enough physicians, nurses, and other health care workers, and no one made much noise about it. But in the past twenty years or so, the public has responded with a request for more physicians, more nurses, and eventually more allied health personnel.

This mandate has begun to produce results. The public has influenced Congress to develop comprehensive health care programs and health education assistance acts (the first one in 1963). In fact, we currently read that we may now be even over-producing physicians, nurses, and other allied health

Ⓒ Edmund F. Ackell 1973

workers in some areas. Recently I read that we have too many people in hospital administration programs in the country, yet many programs are planning to expand. Recently, some of the president's advisors recommended a reduction in health support, mainly through cutting the support for health education itself, as well as for health research. In the past few months this situation has kept many of us in Washington more than we would have liked.

The present increased demand for health services has brought a number of problems for those of us in health education. The problems are not due to failure in health science itself, but mainly to successes. As health science has progressed, we have gotten deeper into the problem of handling complicated diseases; that means we have needed more and more specialty trained individuals. Concentrating on these -- the cardiovascular surgeon, the cardiology technician -- we have lost sight of the day-to-day care provided by the primary physician and by a number of other people. Our nurses have become specialty trained. For example, we developed I.C.U. nurses, both adult and pediatric, cardiology nurses, and anesthesiology nurses. The image of the general nurse deteriorated like that of the generalist in medicine. (Only recently has the general practitioner in medicine become a new entity, and although he has existed for a long time, the general practitioner achieved new standing only two years ago, when the AMA approved this specialty by providing it with board status. General practice is now getting some renewed support for education programs.)

While we were working on problems in kidney disease, cardiac disease, and cancer, medical costs increased because we were dealing in high-cost areas. In the rush to find big cures, we lost sight of the totality of health care and the health care needs of the individual, or we at least neglected to find a method or mode for accessibility to health care.

Health manpower output has been geared to the needs of hospitals and hospital-based specialists because 70 to 90 percent of health care professionals were employed by hospitals. In Florida, approximately 85 percent of all nurses are employed by hospitals, nursing homes, or some health care facility other than physicians' offices. Programs have often been geared toward institutions or facilities rather than based on the needs of the so-called community, whether you define the community as a town, village, county, or state. We hope that in some of the new programs we are developing we will correct some of these deficiencies.

Accurate projections of health manpower are difficult to make because you first must predict the methods of health care delivery to be used in 1980 or 1985. Then you must try to tie together the projected methods and needs of the 1980's and design the necessary educational programs. With changes continually taking place, pinpointing any of these items is difficult. But while we are pinpointing these items we must look forward to the needs of the state as a whole and by region. In Florida, and I am sure in all states, there are regional differences. One cannot do manpower studies and projections and develop educational programs on only a national or a state level, but must break each study down into areas within the state. The Miami area has 1 physician for every 300 individuals, yet in the central and northern parts of Florida four counties have no physicians at all and approximately six Florida counties have only two or three physicians. So Miami's needs for physicians and for specific types of physicians, occupational therapists, physical therapists, and other health care workers differ widely from what Gainesville needs and from what two other metropolitan areas -- Jacksonville and Tampa -- need.

We are posing two basic questions: What are we trying to do? And what personnel do we need to do it? The first question is the hardest to answer. We must have a goal to shoot for; that we have not had at all. Everyone has talked about developing new methods of health care delivery. Many methods are being tried and have been tried, but none have really had the kind of planning necessary to meet the need. Most people now turn to the Kaiser Permanente Plan in California and its type of group practice approach to set the pattern for their own health care programs. Then they decide what type of personnel should be trained in universities and community colleges to meet these needs. But the Kaiser Permanente population is atypical; it is a young, healthy population working in an industrial situation. This is not Florida's population.

President Nixon's Manpower Report to the Congress last year stated that the United States will have about 450,000 physicians by 1980 and that with existing programs the health manpower force will probably be 25 allied health care workers for every practicing physician. In terms of numbers, then, it is no longer the physician and the hospital alone that can or should make decisions on health care needs, methods of health care delivery, and the policies related to health care. Hospitals and physicians will increasingly share this responsibility with other groups that are taking their role in the delivery of health care.

With existing federal support, a 50 percent increase in the number of graduates is expected in most of the health areas by 1980. In allied health manpower, by 1975, we should reach the numerical need projected in the President's health message for 1980. You do not plan new programs if you are going to meet the need ahead of schedule. Instead, you must look again to see if the original projection for 1975 was accurate. As you look, you will find that it is not completely accurate because it was based on the old method, and in some cases, on the present method of health care delivery. That is not the way to plan for new health manpower.

While some of the projections we have are somewhat encouraging, they do not produce the balance that we would expect between supply and demand. The major factors considered should be the geographic distribution of the health force and the type of health professional trained. These are major concerns at the University of Florida

Medical Center. For the past two years we have placed a freeze on the number of interns and residents in most specialty areas; we have, however, allowed one area to expand and develop new programs: that is, the Department of Community Health and Family Practice. And we have initiated a number of programs which will train general practitioners. By holding the line on other specialties, we hope to develop programs based on state needs. We are accomplishing this through three community hospitals where we will soon have family practice programs under way. We are trying to do this with the broad scope of our educational programs, in medicine, dentistry, pharmacy, nursing, and the health related professions. The last mentioned alone has five different programs. We have a joint program in health and hospital administration with the College of Business and a joint program with Santa Fe Community College in the training of physician's assistants. So we have a number of health manpower areas that we are trying to steer in the right direction based on what we think future health care needs will be.

In the geographic distribution dilemma we are not progressing as well as we had hoped. We are involved in two on-going experiments. One is the rural health clinic in Lafayette County, where medical and nursing students are assigned and working with physicians and nurses and, through this experience, gaining a better understanding and feeling for the needs in rural health care. We hope some students will respond by taking training in general practice to go out into these areas. We think this experiment is paying off:

we have a large number of students with this experience apply for newly established general practice residencies. The other experimental program is in Gilchrist County. There each day two trained physician's assistants are assigned to work with a physician. We initiated this program primarily because Gilchrist County is without any physicians and we wanted to see what a physician's assistant is capable of doing, what supervision is absolutely necessary, and what the response of the public is to his providing health care. So far, we have had encouraging results from the people in that county and from program participants.

The federal government has stepped into the picture over the past few years to try to correct some manpower shortages in numbers and distribution. Until a couple of years ago the government never really got into the game of allied health although it was talked about in every piece of legislation. Even then Congress did not appropriate money. Most of the funds went to schools of medicine, osteopathy, and dentistry; little has gone to allied health programs.

The federal government also tried to ease the distribution problem by means of the National Health Service Corps, which assigns physicians, dentists, and others to a community once the local comprehensive health group states or agrees that the community has a special need. Florida has a number of these corps workers. Whether they will remain, once their service time is completed, remains to be seen. The federal government, then, also became interested in the physician's assistant program, feeling that if you give the physician another pair of hands he can see more patients in less time, or at least allocate his time better. But, unless a practitioner is trained to use an assistant, he is not easily convinced of the advantages. It is best to train people now to use assistants whether in medicine or dentistry. Then when they go out they have experienced sharing and can appreciate what the assistant is capable of doing.

The nurse practitioner programs may present a conflict as to what the nurse practitioner can do that the physician assistant cannot do and vice versa. This has not been clearly defined yet; so, because we have not made a decision, we do it the bureaucratic way -- try to keep everybody happy until we make up our minds. In the student health service on campus we have a program in which eight trained nurse practitioners do essentially what a physician's assistant would do somewhere else. This program has worked best with our female students. Since we only have two female physicians in a group of seventeen doctors in the student health service, the nurse practitioners provide coeds with someone they can relate to more easily when the female physicians are busy.

A couple of years ago the governor appointed what is known as the Florida Health Planning Council. This council has four committees: on health services, environmental health, health facilities, and health manpower. These committees are working to develop reports which might be used by the Florida Department of Education to help the community college system and the university system determine which programs should be expanded or where new programs are needed. This report will also be presented to the legislature, which must finally allocate money in order to carry out some of these programs. I feel that the Committee on Health Manpower, which I coordinate, needs a lot more work and support to develop a meaningful report. It is easy enough to get the data; knowing what to do with it and who can make use of it is the problem.

A week ago we were called to Tallahassee to meet with Representative William Conway, chairman of the House Education Committee, and other House and the Senate members to discuss whether the legislature needs to get involved in developing a statewide health manpower program. In all likelihood, this will be done. Such legislative support would help us develop a statewide program involving not only health care delivery planning for Florida but also planning for manpower needed to meet that goal.

When you look at the present manpower pool in Florida (I continue to use Florida as an example of what I really think is happening all over the country) and at existing educational programs in the junior colleges and review the proposed educational programs, you see a very chaotic and disturbing picture. So-called "new careers" are proliferating daily, depending on what a provider desires as an assistant rather than on what the consumer needs for better access to health care. Many sponsoring institutions or groups attach fancy names to the careers; the more names they give them the narrower their thrust becomes and the more limited the health care workers they will produce. We have this problem right now. Many programs are training individuals in a narrow field without a broad educational base and without consideration of the individual's future career laddering opportunities. Some of these programs are training more people than will be needed in their specialties.

We are trying to plan a core curriculum to give a broader base to existing programs in the allied health areas. By this means, we can make it easier for people to shift from one career to another if they wish, without going all the way back and starting over, and we can phase out one part of a program and increase another as needs dictate. This will help us to control programs -- numbers of people and types of programs -- using need estimates, our concern mainly being Florida's needs.

The health manpower group has completed a statewide study of health manpower workers by county, sex, age, and type of practice. This is the initial part of the manpower study. By discovering what we have now and simultaneously working on what health care will be like in the future, we can decide what the state still needs. The committee may then recommend phasing out some programs and increasing others or possibly developing new programs. The allied health study is being conducted by the Health Systems Research Division at the University of Florida. It is coordinated by Dr. K. Kilpatrick, who heads that division, and Dr. Darrel Mase, former dean of Health Related Professions at the University of Florida. That study is well under way. The nursing study is awaiting funding.

In Florida, whether a nurse works or not, she can register as active. On the tallies of active nurses, only two-thirds may be active; others may be at home raising families or just not practicing. We have recommended that registration forms for all the health professions in the state be changed to show whether health care persons are actually working; whom they are working for; the number of hours they work, etc. We need a more accurate picture of what manpower is really delivering the care. With sound data, we may be able to devise a meaningful approach to health manpower needs in conjunction with the legislative committee just formed.

There are many approaches to manpower -- you do not always need new educational programs. Until three years ago, the maximum number of physicians who passed licensure in this state in any one year was 600. The legislature mandated the elimination of a section of the exam and the next year 1,200 successfully passed. Last year 2,200 physicians passed. Three years ago the average physician/patient ratio sought by the nation and recommended by HEW was 1 physician for 800 people. Florida's actual ratio at this time is, I think, about 1 physician for 700 people. Projections for Florida in 1975 or 1976 show 1 physician for every 490 people.

This resume of what is happening in Florida in terms of health manpower hints at directions the state is headed. Observing present programs, plus the manpower studies, many feel that this state will be fairly well-off in some categories of health manpower in less than two years. But until the statewide health manpower study is complete, we cannot verify this prediction.

COMMENTS

Question

Has your health core program really been developed? Did you use another college as a model?

Edmund Ackell

No, we had no model. We have a committee working on it. I was fortunate in being one of the early classes at the medical school at Western Reserve when the first change there in about fifty years of medical education was made. The institution eliminated department teaching and started teaching by systems. This meant a certain type of core-based curriculum for everyone before he went into other areas. What I learned while a medical student we are trying to do here by developing a core base which would fit the needs in some of the basic sciences -- physiology, pharmacology, etc. This approach can help people who reach the top of the so-called ladder and then decide to change.

Question

You mentioned a new system which is increasing the number of physicians who are licensed in Florida each year. Obviously they are coming from without the state. Is this not contributing to the maldistribution of physicians elsewhere in the nation?

Edmund Ackell

I suppose you are right, since you are talking about geographic distribution. I recently spoke with the vice-president of health affairs for the University of South Dakota. That state keeps 1 out of every 12 physicians trained there. Yes, I think Florida does contribute to the manpower shortage around the country because of the number of people who wish to live in Florida. More than two-thirds of the nurses in this state have been trained elsewhere. Of the 3,000 we had last year, more than 2,000 were trained in out-of-state programs. Our general population is also a little bit unusual. Many of you may have read the HEW report this past year which stated that Florida has 14 percent of the nation's population age 65 and over. Arizona is next with 9 percent and I think California is third with 6 percent. So our health care needs are also different. I'm sure many states do consider that Florida is stealing some of their health manpower. But the health professional, I hope, has the right to practice where he or she wishes, and if we live by that principle we can not build a China Wall across the northern border of Florida.

Question

We are interested in what Dr. Ackell said about problems that are due not to failure but to success. You did a fine job of trying to explain that, but I'm still not sure we have been successful.

Edmund Ackell

I think we have been successful in answering specific medical problems and not total health care problems. As we look at the renal and cardiac problem, we see we have made fantastic strides. It has cost a lot of money. We have had to train specialists to do kidney transplants, cardiac surgery, etc. But in our thrust to do this, we inadvertently missed some of the other areas of health care. Our failure has been that we have been striving toward success in a category of health care -- not overall health care. But we have had tremendous successes. We have kidney patients who are living and doing fairly well who five years ago would have had no chance.

Albert Canfield

There is a supposition that the real problem in health care team services is the physician, who sees himself as the only real honest-to-God professional and everybody else as kind of a mechanic. Is there any indication that physicians are beginning to see the light, are perhaps more willing to adjust?

Edmund Ackell

The HEW definition of allied health workers is all professional, technical, and support people needed by physicians, dentists, and nurses to carry out the delivery of health care, so we are stuck there with the government's definition. Point two. Physicians are seeing the light, but state legislatures are also becoming involved. In many states the legislature is insisting on some changes. In our own state, change has occurred in the areas of licensure and legislation related to the activity of physician's assistants. I'm sure you are aware that such changes in health care delivery are not all easy. Medical societies in many states are getting involved, and in a sense, seeing the light in acquiring more help. But the most important point is that we never trained physicians, dentists, and others in the past to work as a team. We trained them to be *sole practitioners. We are not going to change the people who are already in practice. If we are going to have a team approach, we must train people as a team in the health science institution, whether a community college or health center. Dr. Kinsinger mentioned today that the only stride made in the health care team has been in dentistry because some years ago the federal government put money into a DAU -- Dental Assistant Utilization Program -- that trained dental students to work with assistants and hygienists. So dentistry now is ahead of the other professions because it trained its professionals to appreciate and know how to work with assistants before they get into practice.*

Albert Canfield

Do you think the AMA is really much worse than the APTA, AOTA, or any other professional group in terms of protecting its flanks against changes?

Edmund Ackell

No. We all seek identity. We are all jealous of what we have and we would like to have a little more. I think the whole group of health professions must get together and decide where it is going. We will not accomplish this by fighting between groups but rather by deciding we have a problem and are all going to have to solve it together. I think every national organization in health care is a little bit edgy about what is or is not its area of responsibility. That may be the prime problem.

Robert Kinsinger

Two years ago I had the same job you are stuck with -- I guess that is the expression -- of being chairman of a state health manpower group. We came out with the kind of report you're working toward. Every state is a little different, but the problem which arises is that if you do, in fact, get precise statistics, information upon which you can make recommendations, and if you then make recommendations, your job, unfortunately, is done. You are not an action agency. All you can do is say, based on what we have learned and the data we have gathered, we recommend that certain actions take place. The problem, then, is who will take those actions? Do you have any change agent in your state to see that the educational system, the delivery system, and so forth, will be changed as you recommend? In our case we looked for an educational agency or an action agency that could carry out our recommendations. We selected what we believed to *be the most obvious group. Unfortunately the proliferation continued. All of our recommendations, as logical as they seemed, had no value because nobody was able to say, "You must do it this way." So my question to you, obviously, is: as you think down the road to the kinds of recommendations you will make, what action agencies will you be asking to carry them out?*

Edmund Ackell

We hope it will be the action agency I met with last week, the legislature. In our state it is the action agency, whether in dealings with the university or the community college system, because it is where the buck is. And by controlling the dollar, I'm sure the legislature controls the programs all of us conduct.

Robert Kinsinger

That is what I had hoped you would say.

Edmund Ackell

This committee now has been formally organized and will build an active program. The group is talking about recruiting a full-time director and coordinator in the near future. Legislators meeting with the committee said they will assume the responsibility of involvement in terms of seeing which programs actually do and do not get funded. So I think we do have an action agency.

SELECTION OF HEALTH MANPOWER -- ONE POSSIBLE SOLUTION

by Mary H. McCaulley, Ph.D.
Director, Typology Laboratory

and

Margaret K. Morgan, Ph.D.
Director, Center for Allied Health
Instructional Personnel
University of Florida

Difficulties in selection and retention of students and in retention of practitioners in the health related professions continue to plague educators and administrators:

> An associate-degree nursing program reduces a list of 150 applicants to 20 acceptances -- and half of the 20 drop out of the program the first year.
>
> An allied health department accepts, from 600 queries, some 200 applications and from those can choose only 24 students.
>
> A graduate school tells a college of health related professions that according to their standardized scores, many of the applicants to advanced programs do not meet the institution's admission requirements.

An effort is under way at the University of Florida to find some solutions to some of the problems of student, faculty, and clinician selection for the health related professions through

Ⓒ Mary H. McCaulley and Margaret K. Morgan 1973

use of the Myers-Briggs Type Indicator.

In 1921 Carl Jung published his theory of psychological types, which explains many of the valuable differences between one person and another. This theory holds that, to be effective, a person needs to be able to do two things well: (1) take in an experience, and (2) decide what to do about it. In other words, to function well, a person needs an effective way of *becoming aware of* and an effective way of *coming to conclusions* about his outer and inner worlds. There are opposite ways of doing both these things, and they lead to different abilities.

Beginning in the 1940's Isabel Briggs Myers and her mother, Katherine C. Briggs, developed the Myers-Briggs Type Indicator, a non-threatening measure of Jung's concepts. The Indicator is becoming a health manpower tool and counseling instrument, a vehicle for screening people *into*, not out of, academic programs and, therefore *into* careers. Several persons at the University of Florida are continuing the work of Isabel Briggs Myers, who remains an active researcher at 75.

The two ways of becoming aware are through sensing and intuition. Everybody uses both these processes, but not simultaneously. When we are functioning in one manner we cannot be functioning in another. People who prefer sensing prefer to *see*, *touch*, *hear*, *experience* -- right now! They trust *their* experience and what's concrete and tangible much more than they trust reading, theory, and abstractions. All of us use sensing to a certain extent, but individuals who *prefer* sensing have a greater capacity for working out details, have a greater memory for details, such as those involved in nursing or medical technology, and these are probably natural patient care people.

Intuitives are more interested in seeing possibilities, meanings, and relationships; they like to mold diverse parts into a complex whole. The intuitives will see the relationships while the sensing people will see the details.

It is estimated that there are about three sensing types in the general population for each intuitive.

Most academic examinations test the word rather than the deed; thus, intuitives, because of their greater facility with symbols and reading, score higher on the average on college boards, Graduate Record Examinations, and medical aptitude tests. Most health care people, on the other hand, would excel on a practical test.

Freshmen and transfer students entering the University of Florida are about equally divided between sensing and intuitive types.

The decision-making processes are thinking and feeling. Although little in our culture teaches that the feeling process can be rational, feeling and thinking both are rational, sophisticated processes used by each of us, and each of us has a tendency to use one process more than the other.

Those who prefer thinking try to be impersonal, objective, logical; they tend to gravitate into jobs where technical skills are needed.

Those who prefer to make feeling decisions weigh what is important to themselves in terms of their own personal values, and try to weigh what is important to other people in terms of what is valued by those others.

Of almost 900 students recently enrolled in the University of Florida's Introduction to the Health Related Professions course, more than three-fourths have indicated a preference for feeling.

The sensing-intuitive and thinking-feeling dimensions are the two key differences between types, but the orientation we have to our outer and inner worlds is also important: we may be extraverted or introverted.

When we are extraverting we direct our attention to people, objects, and events in the outer world. Those who prefer extraversion tend to have a sociable, outer-directed, action-oriented approach to life, with breadth of interest.

When we are introverting we direct our attention to the concepts and ideas in our inner world. Those who prefer introversion tend to have a contemplative, thoughtful orientation, with depth of interests.

In the general population, extraverts are estimated to outnumber introverts three to one.

And finally, people develop either a judging or a perceptive attitude. Judging types prefer their outer life to be planned, settled, and decided. They tend to become systematic and organized.

Perceptive types prefer to meet life in an expectant attitude, observing events and adapting to change. They tend to be curious, flexible,and spontaneous.

The four preferences, E or I, S or N, T or F, and J or P, form a 16-cell matrix or type table. Each of the 16 types is identified by the four letters that show which pole of each preference this type prefers (Fig. 1).

If the situation calls for doing something systematically, over and over in the same way, the judging type feels comfortable and the perceptive type begins to feel cramped and squeezed in. Therefore the -S-J types, with sensing and judging, are the ones who are not only skilled at handling concrete experiences and detail but also like to have things organized. These -S-J types are thus particularly qualified to give detailed, systematic care in the health related fields.

In general the -ST- types with sensing and thinking tend to focus on facts and handle them through objective analysis, tend to be practical and matter-of-fact and tend to find scope for their abilities in production, construction, accounting, business, economics, law, or, if they go into medicine, as surgeons or obstetricians.

The -SF- types with sensing and feeling also focus on facts but handle them with personal warmth, tending to be sociable and friendly. They are attracted to sales, service, customer relations, welfare work, teaching in the earlier grades, and, in health care delivery, to nursing, pediatrics, and general practice.

The -NF- types, with intuition and feeling, look for possibilities and handle these with personal warmth, enthusiasm, and insight. They are the possibilities-for-people people, attracted to research, college teaching, preaching, counseling, writing, art, psychology, and psychiatry.

The -NT- types, with intuition and thinking, also see

FIGURE 1

TYPE TABLE

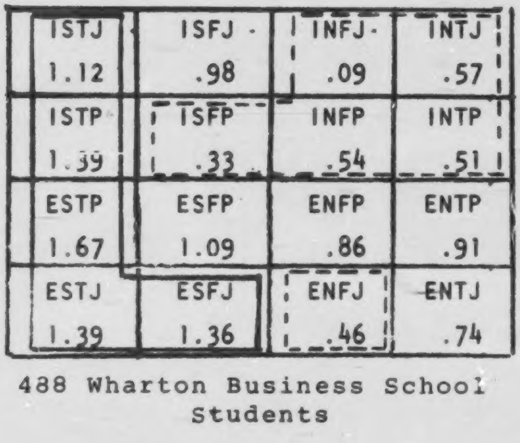
		SENSING TYPES		INTUITIVES			
		WITH THINKING	WITH FEELING	WITH FEELING	WITH THINKING		
INTROVERTS	JUDGING	**ISTJ** Introverted Sensing with thinking	**ISFJ** Introverted Sensing with feeling	**INFJ** Introverted Intuition with feeling	**INTJ** Introverted Intuition with thinking	JUDGING	INTROVERTS
	PERCEPTIVE	**ISTP** Introverted Thinking with sensing	**ISFP** Introverted Feeling with sensing	**INFP** Introverted Feeling with Intuition	**INTP** Introverted Thinking with Intuition	PERCEPTIVE	
EXTRAVERTS	PERCEPTIVE	**ESTP** Extraverted Sensing with thinking	**ESFP** Extraverted Sensing with feeling	**ENFP** Extraverted Intuition with feeling	**ENTP** Extraverted Intuition with thinking	PERCEPTIVE	EXTRAVERTS
	JUDGING	**ESTJ** Extraverted Thinking with sensing	**ESFJ** Extraverted Feeling with sensing	**ENFJ** Extraverted Feeling with intuition	**ENTJ** Extraverted Thinking with intuition	JUDGING	

possibilities, but process information through objective analysis and are intellectually ingenious. They are found in research, science, invention, engineering, securities analysis, management, and, if in medicine, specializing in pathology, research, or similarly complex fields.

Of 488 undergraduates in the Wharton School of Finance and Commerce (Fig. 2), the practical, action-oriented ES-- types, the extraverts with sensing, were significantly more frequent than would be expected, and the IN-- types, the introverts with intuition, are significantly less frequent. The most prevalent types are outlined in solid lines and the rarer types are outlined in broken lines.

A sample of more than 700 CalTech science students (Fig. 3) forms a near mirror image of the Wharton business students. As you can see, they clustered in the IN-- types, while the ES-- types "stayed away in droves."

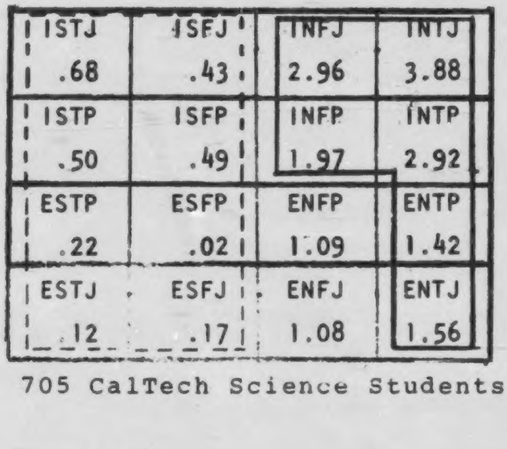
Figure 2



ISTJ 1.12	ISFJ .98	INFJ .09	INTJ .57
ISTP 1.39	ISFP .33	INFP .54	INTP .51
ESTP 1.67	ESFP 1.09	ENFP .86	ENTP .91
ESTJ 1.39	ESFJ 1.36	ENFJ .46	ENTJ .74

488 Wharton Business School Students

Figure 3



ISTJ .68	ISFJ .43	INFJ 2.96	INTJ 3.88
ISTP .50	ISFP .49	INFP 1.97	INTP 2.92
ESTP .22	ESFP .02	ENFP 1.09	ENTP 1.42
ESTJ .12	ESFJ .17	ENFJ 1.08	ENTJ 1.56

705 CalTech Science Students

Ratio = College frequency/High School frequency

Of 2,200 engineering freshmen from three institutions (Fig. 4), the most heavily represented were the -N-J categories, the intuitives with the judging attitude. The sensing types were under-represented.

Few of a class of art education students (Fig. 5), with their affinity for abstraction, came from the practical, realistic -ST- types.

Figure 4

ISTJ 1.26	ISFJ 1.06	INFJ 2.49	INTJ 2.94
ISTP .44	ISFP .44	INFP 1.21	INTP 1.46
ESTP .40	ESFP .21	ENFP .79	ENTP .92
ESTJ .57	ESFJ .51	ENFJ 1.73	ENTJ 1.95

2,188 Engineering Freshmen from Cornell, M.I.T., and R.P.I.

Ratio = College frequency/
High School frequency

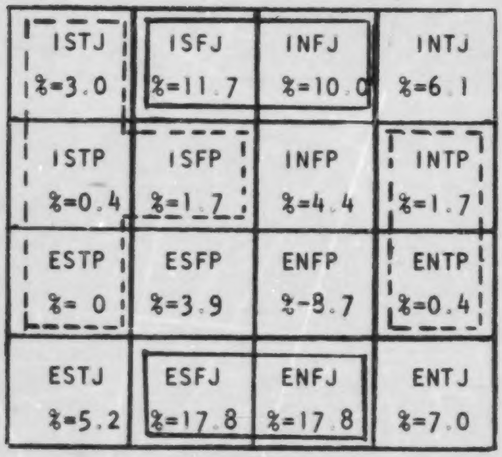
Figure 5

ISTJ %= 0	ISFJ %= 0	INFJ %= 9.7	INTJ %= 3.2
ISTP %= 0	ISFP %= 0	INFP %=25.8	INTP %=12.9
ESTP %= 0	ESFP %= 3.2	ENFP %=22.6	ENTP %=6.5
ESTJ %= 0	ESFJ %= 9.7	ENFJ %= 6.5	ENTJ %= 0

31 Students in Art Education

The art education type table differs from one of 230 ministers and ministerial students (Fig. 6), primarily --FJ types, with feeling and the judging attitude, which also differs from a profile (Fig. 7) of a metropolitan police department -- fair-thinking, decisive, action-oriented --

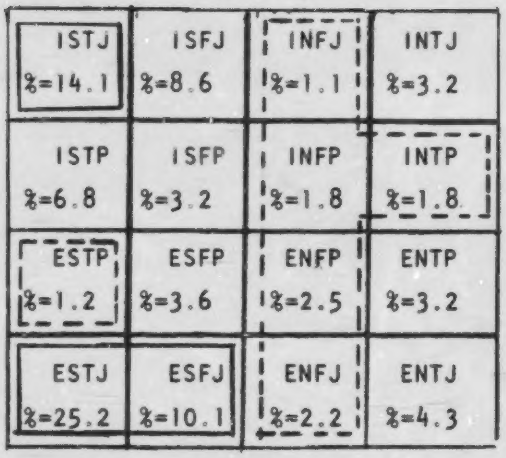
Figure 6



ISTJ %=3.0	ISFJ %=11.7	INFJ %=10.0	INTJ %=6.1
ISTP %=0.4	ISFP %=1.7	INFP %=4.4	INTP %=1.7
ESTP %= 0	ESFP %=3.9	ENFP %=8.7	ENTP %=0.4
ESTJ %=5.2	ESFJ %=17.8	ENFJ %=17.8	ENTJ %=7.0

230 Ministers & Divinity Students

Figure 7



ISTJ %=14.1	ISFJ %=8.6	INFJ %=1.1	INTJ %=3.2
ISTP %=6.8	ISFP %=3.2	INFP %=1.8	INTP %=1.8
ESTP %=1.2	ESFP %=3.6	ENFP %=2.5	ENTP %=3.2
ESTJ %=25.2	ESFJ %=10.1	ENFJ %=2.2	ENTJ %=4.3

A Metropolitan Police Department

and from the pattern of 62 psychology majors (Fig. 8), almost half of whom were in the possibilities-for-people column.

In a frequently cited study, Isabel Briggs Myers, with the cooperation of the American Association of Medical Colleges, tested more than 4,000 medical students. Twelve years later, she looked at how they had selected themselves into medical specialties.

She found, for instance, that no ISTPs or ESTJs, and few other sensing types, had been attracted into neurology (Fig. 9). However, three of the four -NT- types, with intuition and thinking and with their inclination toward complexity and theory, had a higher selection ratio for neurology than for any other specialty.

Figure 8

ISTJ %=5.64	ISFJ %=6.59	INFJ %=3.76	INTJ %=4.56
ISTP %=2.11	ISFP %=2.11	INFP %=21.29	INTP %=4.56
ESTP %=1.52	ESFP %=5.78	ENFP %=22.09	ENTP %=5.78
ESTJ %=2.11	ESFJ %=3.76	ENFJ %=6.21	ENTJ %=2.11

329 Students in University of Florida Courses in Introductory Psychology

Figure 9

ISTJ .88 %=4.8	ISFJ .53 %=2.4	INFJ .69 %=2.4	INTJ 2.75 %=17.1
ISTP .00 %=0	ISFP .45 %=2.4	INFP .94 %=7.3	INTP 2.35 %=24.4
ESTP .89 %=4.8	ESFP .77 %=4.8	ENFP 1.16 %=9.6	ENTP .34 %=2.4
ESTJ .00 %=0	ESFJ .76 %=4.8	ENFJ .55 %=2.4	ENTJ 1.85 %=9.6

Neurology
(Population of 41 from 4,272 physicians identified by specialty [Myers & Davis, 1964] -- Ratio equals % of type in specialty/% of type in entire medical sample)

Anesthesiology (Fig. 10) was the specialty most conspicuously selected by the IS-- types, the introverts with sensing, and most conspicuously avoided by the -NF- types, with intuition and feeling.

Psychiatry (Fig. 11) was the specialty most significantly avoided by the ES-- types, the extraverts with sensing, who like things solid and sensible. It was chosen more frequently by the -N-P types, the intuitives with the perceptive attitude.

Figure 10

ISTJ 1.21	ISFJ 1.76	INFJ .38	INTJ .87
ISTP 2.05	ISFP 1.84	INFP .69	INTP .84
ESTP .49	ESFP .85	ENFP .56	ENTP .84
ESTJ 1.01	ESFJ 1.26	ENFJ .60	ENTJ 1.02

Anesthesiology
(Myers & Davis,. 1964)

Figure 11

ISTJ .44	ISFJ .68	INFJ 1.26	INTJ 1.46
ISTP .39	ISFP .57	INFP 2.04	INTP 1.84
ESTP .25	ESFP .33	ENFP 1.52	ENTP 1.20
ESTJ .36	ESFJ .16	ENFJ 1.32	ENTJ 1.18

Psychiatry
(Myers & Davis, 1964)

(Ratio equals
% of type in specialty/% of type in
entire medical sample)

Surgery (Fig. 12) had a rather even type distribution, except that a significant number of ESTPs chose that area of specialization. Dr. McCaulley terms ESTPs the easy-going, flexible, skill-in-action people, the movie-type M*A*S*H surgeons.

Isabel Briggs Myers has acquired data on 11,000 students from 71 diploma nursing programs. She has compared 1,900 of those who graduated (Fig. 13) with 900 who dropped out (Fig. 14). The two types most attracted into nursing were the ESFJs - the warm and friendly types who entered with lower admission scores - and the ISFJs, the type Mrs. Myers calls the super-dependables, those who tend to become nursing supervisors. These two types likewise had the lowest proportion of dropouts (Fig. 15).

Figure 12

ISTJ 1.00 %=4.9	ISFJ .93 %=4.7	INFJ .97 %=4.5	INTJ .71 %=5.3
ISTP .98 %=6.5	ISFP 1.00 %=6.0	INFP .76 %=6.2	INTP .91 %=8.2
ESTP 1.38 %=7.1	ESFP 1.21 %=7.6	ENFP .95 %=7.3	ENTP 1.00 %=6.7
ESTJ 1.16 %=8.0	ESFJ 1.08 %=5.8	ENFJ .95 %=5.3	ENTJ 1.13 %=5.8

General Surgery
(Myers & Davis, 1964)

(Ratio equals % of type in specialty/% of type in entire medical sample)

Figure 13
Students from 71
Diploma Nursing Programs

ISTJ N=84 %=4.4	ISFJ N=269 %=14.3	INFJ N=80 %=4.2	INTJ N=16 %=.8
ISTP N=22 %=1.2	ISFP N=82 %=4.3	INFP N=88 %=4.7	INTP N=19 %=1.0
ESTP N=24 %=1.3	ESFP N=134 %=7.1	ENFP N=207 %=11.0	ENTP N=27 %=1.4
ESTJ N=167 %=8.8	ESFJ N=469 %=24.8	ENFJ N=144 %=7.6	ENTJ N=55 %=2.9

1887 Freshmen Who Graduated

Figure 14
Students from 71
Diploma Nursing Programs

ISTJ N=44 %=4.8	ISFJ N=94 %=10.2	INFJ N=47 %=5.1	INTJ N=13 %=1.4
ISTP N=6 %=.6	ISFP N=49 %=5.3	INFP N=55 %=6.0	INTP N=12 %=1.3
ESTP N=22 %=2.4	ESFP N=74 %=8.0	ENFP N=122 %=13.2	ENTP N=28 %=3.0
ESTJ N=71 %=7.7	ESFJ N=181 %=19.6	ENFJ N=80 %=8.7	ENTJ N=23 %=2.5

921 Freshmen Who Dropped Out

Figure 15
Students from 71
Diploma Nursing Programs

ISTJ 1.07	ISFJ .72	INFJ 1.20	INTJ 1.66
ISTP .56	ISFP 1.22	INFP 1.28	INTP 1.30
ESTP 1.88	ESFP 1.13	ENFP 1.21	ENTP 2.12
ESTJ .87	ESFJ .79	ENFJ 1.14	ENTJ .86

Dropout Ratio
[% Graduate ÷ % Dropout]

(Ratio greater than 1 means higher dropout rate)

From data on the 11,000 students and on 670 nursing faculty -- data yet to be processed and interpreted -- could come identification of some of the characteristics which set the various specializations within nursing apart from each other, and which distinguish the educator from the clinician.

University of Florida faculty and doctoral students are beginning to look at profiles of allied health professionals.

They find that the occupational therapy type table (Fig. 16) looks much like that for nursing (see Fig. 13), which looks much like that for physical therapy (Fig. 17),

Figure 16

ISTJ %=5.9	ISFJ %=13.3	INFJ %=7.0	INTJ %=4.4
ISTP %=1.9	ISFP %=2.6	INFP %=7.0	INTP %=6.3
ESTP %=1.3	ESFP %=2.5	ENFP %=14.6	ENTP %=5.1
ESTJ %=3.8	ESFJ %=12.0	ENFJ %=4.4	ENTJ %=7.0

Occupational Therapists

Figure 17

ISTJ %=10.0	ISFJ %=10.8	INFJ %=5.4	INTJ %=1.5
ISTP %=2.3	ISFP %=6.9	INFP %=13.8	INTP %=1.5
ESTP %=1.0	ESFP %=8.5	ENFP %=13.1	ENTP %=3.8
ESTJ %=3.8	ESFJ %=10.0	ENFJ %=3.1	ENTJ %=4.6

Physical Therapists

which resembles the type table for the Introduction to the Health Related Professions classes (Fig. 18).

Looking more closely within a health related specialty, for instance, researchers find that medical technology clinicians (Fig. 19) are the systematic, careful, detail-conscious types, that is, mainly sensing types with the judging attitude:

Figure 18

ISTJ %=3.7	ISFJ %=10.5	INFJ %=4.0	INTJ %=1.8
ISTP %=2.1	ISFP %=4.1	INFP %=12.2	INTP %=2.4
ESTP %=2.5	ESFP %=7.1	ENFP %=16.2	ENTP %=2.7
ESTJ %=5.6	ESFJ %=13.4	ENFJ %=8.5	ENTJ %=2.5

Introduction to
Health Related Professions

Figure 19

ISTJ %=15.4	ISFJ %=11.4	INFJ %=3.4	INTJ %=4.0
ISTP %=1.7	ISFP %=8.0	INFP %=4.0	INTP %=4.0
ESTP %=1.7	ESFP %=6.3	ENFP %=2.9	ENTP %=3.4
ESTJ %=14.9	ESFJ %=10.9	ENFJ %=0	ENTJ %=8.0

Medical Technology Clinicians

and that medical technology educators (Fig. 20) are primarily people who have more concern with the human aspects of the profession. But students presently enrolled (Fig. 21) are predominantly of the feeling types.

Figure 20

ISTJ %=8.3	ISFJ %=16.7	INFJ %=0	INTJ %=12.5
ISTP %=4.2	ISFP %=4.2	INFP %=8.3	INTP %=0
ESTP %=4.2	ESFP %=0	ENFP %=8.3	ENTP %=0
ESTJ %=8.3	ESFJ %=12.5	ENFJ %=0	ENTJ %=12.5

Medical Technology Educators

Figure 21

ISTJ %=8.2	ISFJ %=12.4	INFJ %=3.1	INTJ %=4.1
ISTP %=3.1	ISFP %=6.2	INFP %=13.4	INTP %=3.1
ESTP %=1.0	ESFP %=4.1	ENFP %=8.2	ENTP %=4.1
ESTJ %=5.2	ESFJ %=14.4	ENFJ %=5.2	ENTJ %=4.1

Medical Technology Students

Will these feeling types drop out of the profession as the work becomes more technically oriented? Will the students who are "different" persist and enhance the profession, remain in and create turbulence, or drop out? We don't know.

Some of those concerned with the direction of the preparation of health manpower will be asking these and other questions in months to come, particularly such questions as, "What criteria point to the successful clinician? What are the characteristics of the effective allied health educator?"

There is no single electroencephalogic technologist (EEG), or dentist, or nurse type, but type distributions do tend to form patterns. The types that go most readily into a given field tend most consistently to remain in that field.

When the right questions have been asked, and some of the answers found, we can say to the high school or college student, "You have certain aptitude and personality characteristics. Others with characteristics similar to yours have tended to do well in pediatric nursing -- or chemical engineering, police science, sales, medical research, or respiratory therapy technology." Taken further, the same computer printout which relays that message could also point out to the student some characteristics of occupations for which he would seem fitted, and could tell him whether in the next year, or five or ten years, vacancies will be few or plentiful in some of the occupational fields he might wish to pursue.

REFERENCE

Myers, Isabel Briggs & Davis, Junius A. Relation of medical students' psychological type to their specialties twelve years later. Research Memorandum, Educational Testing Service, 1964, No. 15.

THE ALLIED HEALTH CURRICULUM: WHERE DOES IT START AND WHERE DOES IT STOP?

Moses S. Koch, Ed.D.*

Director, Health Care Project, American Association of State
Colleges and Universities, Washington D.C.

This seems to be a time for general confessions, voluntary or involuntary, in the United States, so let me make a confession concerning the title of my remarks. Coming from Washington yesterday I had a three-hour layover in Atlanta. I spent most of that time reading a booklet with which some of you may be familiar: A Handbook for Change, published by the Student American Medical Association. I am going to talk a great deal about it today; therefore, I have scratched my original title. My last remark today will be the title of my talk.

I will be talking about infusing the curriculum with the potential of students, the potential of clinicians, and the potential of patients. You can assign your own title, but that is what I want to talk about with you.

---

* Effective Sept. 1, 1973, president, Monroe Community College, Rochester, N.Y.

ⓒ Moses S. Koch 1973

Thirty-eight years ago Lee and Jones first concluded that there was a physician shortage in this country. In the early 1960's, Dr. George Albee pointed out that there was no conceivable way American schools could meet health manpower needs if we were to continue to train only graduate-level professionals. We in allied health have come a long way in a short time. In fact, as we have heard this morning, and before this morning, we may have gone too far in proliferating - I commend to you Dr. Kinsinger's article in the latest Journal of Allied Health [February 1973].

In our zeal to produce the necessary allied health manpower, we have expanded particularly in two directions: (1) we are producing the types and configurations of skills needed, generally at a high level; and (2) we are providing an increased number of trained persons with those skills.

STUDENTS, CLINICIANS, AND PATIENTS AS CONTRIBUTORS TO HEALTH MAINTENANCE AND CARE

In our accelerated effort, however, we have tended to overlook what I would like to consider a third component, which is particularly related to optimum quality and to change. I refer to the intentional process of extracting from each person his or her maximum inherent potential in health care. I intend to be specific and give you some examples of how students can contribute more to their own health care learning than we are presently recognizing, how nurses and possibly other clinicians can contribute more to health care delivery than we have recognized, and how consumers or patients can contribute more to their own health care maintenance than we are recognizing.

Evoking these latent sources of health care improvement can be deliberately incorporated into the curriculum. I accentuate "deliberately" because we have been engrossed with type and quantity. I do not mean to imply that we have overlooked quality, but we have been engrossed with type and quantity of manpower, and we have given, I believe, only peripheral respect to converting the student's, the clinician's, and the consumer's potential for health care skills. I propose not only that we intentionally seek these latent sources of health care skills, but that we make this search a deliberate central thrust of the allied health curriculum.

The instances that I will cite are not intended, certainly, to be exhaustive, nor maybe even necessarily, the best examples. Some of them may not apply to your institution. They are examples of a type of thinking or orientation which I believe is needed in allied health curricula. All the examples have one common denominator: Each represents the discovery and conversion of an existing, but mostly untapped, potential in students, clinicians, or consumers.

STUDENTS AS A NEW POTENTIAL

Let me begin in an area in which I know Florida is already well advanced, the area of utilizing high school students as a source of occupational skills in health care. I do this, not feeling that I am bringing coals to Newcastle, but hopefully feeling that there may be a few ideas that are operating elsewhere that might be able to enrich Florida and certainly vice versa. Secondary education is largely a resource upon which we in allied health have barely begun to capitalize. In higher education generally, we have had a tendency to insulate ourselves academically from our next-door neighbor, the high school. Granted, this barrier is being broken with increasing frequency, as here in Florida, by concurrent courses, by early admission, and by even the "Simon's Rock experiment," which, if you're not familiar with it, is very interesting. (Simon's Rock is a college in Massachusetts. They don't call themselves a college -- they call themselves Simon's Rock. It's a four-year institution of the eleventh, twelfth, thirteenth, and fourteenth years. Its leadership is experimenting with that as a unit of education, also experimenting with the possibility of offering a bachelor's degree at the end of the fourteenth year, though that was not their original intention.) But I refer not to such structural changes, however valuable they are.

There are in allied health a few operational instances which now draw directly upon the potential of high school students:

> *Baylor University has just assisted in the opening of a Health Careers High School with a curriculum which will interdigitate with the universities' health curricula. New Haven, Connecticut, has high school health curricula in which the facilities of Yale University fulfill major roles. Johns Hopkins Medical Institutions operate a variety of such programs, which train students for health occupations (Koch & Hollander, 1972).*
>
> *The most exciting, I think, is a program wherein 40 high school seniors are selected because they are neither occupationally oriented nor college-oriented, but show some indication of potential interest in a health career. These seniors spend their last year of high school completely away from their high school building. For the full academic year they are in the hospital, five days a week: In the morning, in a clinical job, in the afternoons with a specially chosen teacher, learning the traditional subjects, but oriented to health care. For example, political science and economics revolve about questions such as health insurance, health delivery costs, and so on. History reduces the roles of wars and battles and emphasizes the history of science and medicine. Mathematics is pitched to metric measurements and laboratory and biomedical statistics. Early assessment of this program indicates that 82 percent of these young people go on to higher education, versus 22 percent of their classmates of a similar group statistically matched in high school. It indicates that an equally disproportionate number of them continue in health care fields. This screening-in program converts the potential of young persons who might otherwise have wasted valuable years before they discovered their potential, if indeed they ever did.*

WORK EXPERIENCE PERFORMANCE TESTS FOR TRANSFER CREDIT

Another academic barrier which has become almost a truism is the reluctance of colleges to grant credit for work experience or training in a noneducational institution. Hospitals, for example, are often deep resources of potential for allied health skills. In a study for Johns Hopkins, we discovered that our first task in developing a master plan for their new School of Health Services was to determine what formal education was transpiring within the hospitals which constitute that complex. Advance estimates varied from 20 programs to 40 programs, but no one knew exactly how many. The study disclosed 62 on-going, separate, definable programs, ranging in length from two weeks to three years (Koch & Woolley, 1972).

Some required an eighth-grade education. Others were considered graduate level; yet the vast majority of those students receive little, if any, transfer recognition by colleges.

The most favorable treatment a hospital-trained person is likely to receive from a college is the offer to take equivalency examinations, which means, essentially, that we still think in terms of courses as the only recognizable unit of measurement. A few colleges, however, have begun to administer performance tests, where applicable, in addition to paper-and-pencil tests. Those few institutions take the applicant into the clinical setting and observe him performing specific tasks. They attempt to assess his present potential; after all, the ultimate test is whether a person can perform a particular procedure. Paper tests alone, I submit, inadequately measure experiential learning. Thus, if we are willing to utilize performance tests, we can tap a great pool of skills acquired in work and in training in hospitals and elsewhere. Without performance tests, we fail to recognize this potential. In fact, I expect that someday we will have a legal test of the concept that says that because a person scores 350 he passes a nurse licensing examination, and I, with a score of 349, am therefore not competent. I am not a lawyer, but I expect this, especially since the recent Supreme Court decision that said, in effect, that an industrial company cannot use high school graduation as a requirement unless the high school education is directly applicable to job performance. It seems to me, therefore, that my nursing test example would be unconstitutional, and I suspect someone is going to test it.

The problem is not so much the truism, that colleges hesitate to accept experiences or hospital training as transferable; the problem is our greater hesitancy to use performance tests as one way of assessing the worth of the student's earlier experience, and thus extracting the maximum of his or her current potential.

THE STUDENT AS A LEARNING RESOURCE

Now let me turn to the recently published monograph I spoke of earlier, A handbook for change (Graham & Loyer, 1972). Its publication was recommended by a joint commission of medical students and physicians. Among its recommendations are the following: That each medical school develop a standard student evaluation profile which in a multi-scale, narrative fashion reflects both the intellectual and behavioral aspects of the student's performance. Reading this book gave me a strange feeling because I felt that it would really be far better for you to read this book than to listen to me. I found a great deal of consonance between what I am trying to say and the conclusions that these medical students have reached.

We have all read in college catalogs statements such as these two on the purpose of the college: "To assist each student to realize his maximum potential." "To recognize the worth of the individual student." We chuckle over these, and with good reason. These objectives appear in one form or another in almost every college catalog. Yet how many colleges deliberately capitalize on the student as a learning resource, as a teacher, as a peer learner/peer teacher?

Medical interns -- and I must again state that I wrote this before I read the booklet -- medical interns readily admit that they learn much from nurses and from other medical students. Many students at all levels of the education structure come to class with pertinent experience valuable to other learners, especially in health care. Some students learn certain portions of a course faster than their classmates do, and thus are sought informally by their classmates as tutors. Confronted as we are now with increasingly unfavorable student-teacher ratios, we need to make a conscious effort to identify the latter students and to utilize them as supplements to the teacher, as teacher-support personnel, if we can borrow a term from medicine. To date, this has been left to chance. The sensitive allied health curriculum, however, can intentionally capitalize on this talent reservoir, and, by design, incorporate this chance phenomenon into its structured learning methodology.

Again I return to my little "bible" here and quote from its recommendations (Graham & Loyer, 1972):

> We have been impressed by the quality and quantity of learning generated in groups of students who formally or informally join together in their studies. With the advent of computer-assisted individualized learning, a high degree of self education by small groups of students now seems not only possible, but desirable [p. 39].

Mind you, we are listening to students -- sophisticated students, but students.

NURSE EDUCATION AS A CORE EXPERIENCE

Earlier I referred to a study of health care delivery education at the Johns Hopkins Medical Institutions which produced 62 programs. Almost one-third of the programs -- 18 -- involve nursing. Nurses are being trained as anesthetists, midwives, psychiatric counselors, pediatric practitioners, chronic disease management specialists, family health team leaders, unit managers, and so on. They are being retrained from a common experience into new fields for their skills, and I propose that by recognizing this we can retrain people sometimes to change the system, as in the following examples:

At Lake Superior State College in Michigan, nurses now are being educated to become administrators of extended care facilities.

A 1971 amendment to the Idaho Nurse Practice Act recognizes the expanded role of the nurse, as a practitioner who may carry out medical therapeutics, including writing prescriptions and certain medical diagnosis, in joint practice with a physician.

In Washington, D.C., and I am sure a few other cities, there is at least one nurse in private pediatric practice.

In Chicago, the National Commission on Joint Practice, with the support of a Kellogg grant, recently began a three-year study which will be replicated in every state, to examine new patterns for optimal use of physician-nurse skills. From such experience it appears that the knowledge and skills which constitute nursing can, in effect, be a core from which much spin-off potential can be realized.

We have extolled the core concept for a long time, yet few if any colleges have succeeded in developing and operating a core program. Ironically, we may have had in nursing all along the structure of at least a core experience, without recognizing it as such.

Apropos of utilizing the basic nursing education as a core for retraining for other health delivery fields, a spokesman for the Navy said recently that it is probably true that a nurse could acquire eight or ten more basic skills and take care of most of the health care needs of the individual.

No doubt the best structured channel for formally examining this curricular potential will be the National Joint Practice Commission, working from Chicago, and in each state. I certainly suggest that you work closely with its counterpart in your state.

EMPATHY AS A THERAPEUTIC ACTION

May we consider for a few minutes empathy as a therapeutic action. Some of that began right here at the University of Florida in the person of Arthur Coombs and his staff, who have advanced the concept of perceptual psychology. In a therapist-patient relationship, this means essentially that a patient's reaction to treatment often varies in direct relationship to how he perceives himself as being treated as a patient by the therapeutic agent, whether that be nurse, technician, physician, or orderly. Dr. Coombs' concept has been affirmed in various studies. Most recently, a study was made of the therapeutic effectiveness of certain surgery. The research disclosed a marked relationship between the physician's attitude toward the patient and the patient's recovery rate. I think sometimes of the emotional effect of a nurse in a coronary care unit who had expected a patient to be removed to a private room before she returned the next evening and who, on returning and finding the patient still in the coronary care unit, blurted out, "Oh, are you still here?" Effects of the interpersonal relationship between clinician and patient prevail at all levels. Empathy is as important in the relationship between the central ward clerk and the patient as between the psychiatrist and the patient.

Perhaps the most remarkable potential for change in health care delivery, then, rests in the curriculum, which can help the student become aware of the total environment in which people are born, grow, struggle to stay well, become ill, and too soon die. The sensitive curriculum will evoke from the student his maximum potential as an empathic agent of therapy. I quote again from the Student American Medical Association (Graham & Loyer, 1972):

> As we learn more about how to intervene successfully in many of the physical aspects of pathogenesis, we also learn a great deal more about how social and behavioral factors may cause, mask, intensify, or ameliorate the basic disease process. It is thus imperative that our health science students receive ample instruction and experience in the behavioral sciences [p. 3].

PATIENT POTENTIAL IN HEALTH MAINTENANCE AND CARE

Let us talk for a few minutes about the patient and about alerting the students in our curricula to patient potential. Traditionally, the patient is viewed as a passive physical object manipulated by the healer. Most patients, I think, still retain this concept, failing to perceive their own potential role in health maintenance and in recovery from illness. A few curricula, however, have recognized the patient potential. For example, Good Samaritan Hospital in Baltimore has two training programs designed for the management of chronic diseases, one in connective tissue diseases and the other in diabetes. In each case the health team is trained to incorporate the patient into its deliberations and to give the patient as much opportunity for making decisions as possible in working out, monitoring, and modifying his own health maintenance plan. Some of the early follow-ups of this program indicate that health maintenance is higher when the patient is actively involved in the management decisions and procedures.

I quote from the Student American Medical Association (Graham & Loyer, 1972):

> The patient has too long been estranged from participating in his own health maintenance and care. We advocate vigorous promotion of all measures which will responsibly increase the individual's ability to care for himself [p. 16].

It makes a trenchant point:

> One of the critical factors in health manpower availability is the rate of utilization of services by the population. Both under- and over-utilization are detrimental to the system, and the one person who can best govern intelligent utilization is the patient himself [p. 16].

CONSUMER POTENTIAL

Education for patient potential is but an extension of education for consumer potential. Confronted now as many consumers are with nurse practitioners, family health advocates, physician's assistants, and other new non-physician types, some consumers resist, some do not understand, some accept totally, and others accept as second-class contributors these new health care personnel.

Some communities confronted with this adjustment, however, are being helped by an allied health school team to understand and relate affirmatively to these new forms of delivery. The consumers also receive orientation on matters such as when to insist on seeing a physician, how to insist upon it, when to seek an additional medical opinion, what size bill to expect, how to deal with third-party payers, how a community can develop a prepaid health package, and other knowledge and skills to safeguard health interests.

This type of continuing education is not simply to protect the consumer, although that in itself is sufficient justification. Effective consumer education enables the individual, the patient, and the community worker each to realize his potential as a health maintenance agent (Graham & Loyer, 1972):

> Particular emphasis should be placed on health maintenance education in present programs of primary and secondary education. Consumer health education programs should begin in early childhood, and continue throughout the period of formal schooling. Special targeted programs should be available for adults and should be tied in with the individual's own program of health maintenance [p. 16].

If I have accomplished anything today, if I have at all acquainted you with this little book, I think I have succeeded.

CONCLUSION

N. H. Becker (1969) wrote an article in Public Health Reports in which he says that there is an imposing time lag between the disclosure and application of new public health knowledge, a lag which deprives the public of many benefits of medical research. As examples, he cites the long delay before the use of Jenner's smallpox vaccination procedures and the delay in the medical profession in accepting the ideas of

Lister and Semmelweis concerning puerperal sepsis. I do not believe that allied health education need experience a similar phenomenon. The distance between the disclosure of a curricular advance and the implementation of that advance need not be so great -- if we deliberately seek the health care potential in our students, in our clinicians, and in our patients. A Handbook for Change (Graham & Loyer, 1972) has a rather bitter dedication:

> To our patients forced to seek care from a generation of health professionals who have been inadequately prepared to meet the demands for health care in a rapidly changing society, and to Abraham Flexner whose work so standardized medical education that any real change becomes revolutionary [n.p.].

Now, that, I submit, is a bitter statement from students who are future clinicians. But hopefully, our allied health students will never have cause to level such criticism at their schools or their teachers. I have promised you the title of my remarks. It is no great revelation, but I think if I were to retitle my presentation I would call it, "They do not serve who sit and wait."

REFERENCES

Becker, N. H. Predictors of innovative behavior among local public health offices. Public Health Reports, December 1969, 84, 1063-1068.

Graham, Robert & Loyer, Jerry (Eds.) A handbook for change. Rolling Meadows, Ill.: Student American Medical Association, 1972.

Koch, Moses S. & Hollander, Charles. The health sciences careers program. Health Services Reports, November 1972, 8(9), 787-802.

Koch, Moses S. & Woolley, Priscilla M. Allied health training at Johns Hopkins Hospital. Journal of Medical Education, May 1972, 47, 333-338.

COMMENTS

Question

A question about the slide presentation: Was there consideration of any other theory of vocational choice? Roe's theory, for instance? There was a statement that linked sales people with social workers which was a little surprising to me from an innate kind of feeling, and also I think Roe's theory wouldn't fit in there.

Mary McCaulley

This instrument was developed originally specifically to test Jung's theory, so we could see if it would work. The types that we think may have the most natural affinity for patient care are the people who like to do the practical real things with a people orientation. There are more of those in nursing and most of our health care fields. However, there are people who also like to do active practical things with a people orientation that go into sales. That association strikes me as strange, too, because I had those careers in two different cubbyholes in my own mind.

Question

Were the tests administered after the persons were selected? You can't get into Cal Tech unless you're a genius, and you've got to be pretty close to one to stay in Cornell. To get into the Wharton School of Business you've got to have both money and intelligence. So were these people tested after they were there?

Mary McCaulley

Yes.

Question

Well, what does it prove? . . . That they're born with these interests?

Mary McCaulley

That's always a question we are faced with. Are people certain types because we made them that way by training them, or are they certain types because that's the kind of people they are? If you test medical *students when they're freshmen they're medical students. Twelve years later, they're neurologists.*

Comment

Medical students have had an awful lot of forming done to them.

Mary McCaulley

Right now we're looking at data on freshmen here at the University of Florida. We are making distributions, for example, of fields they think they'll go into. There seems to be a phenomenon that people of certain types just gravitate to certain occupations. What we don't know yet is, if you're a very rare type in that field, are you going to be a visible misfit, waiting until your kids get out of college so you can do something else, or are you going to be the person who adds the whole new dimension, the one that brings the profession into the 21st century.

Comment

I feel we have a horrible shortage of career information. About two-thirds of our people after they graduate from high school know about one-tenth of the fields they might even be interested in. So here they are in the Wharton School of Business and that's because Daddy was a bookkeeper or something.

Comment

Having taught in a health occupations education program in high school, I can see a correlation between what Dr. Koch and what Dr. McCaulley said.

Mary McCaulley

As freshmen certain types have decided what they want to major in; other types haven't. We all know the seniors who say, "Now let's see, what do I want to do?" I'm one of those who doesn't like to close doors. Going back to what Dr. Koch said, it would be fascinating to see the natural peer teacher. It's a beautiful idea. I wonder what types would turn out to be the natural peer teachers. Are they the same types that turn out to be the natural health educators.

Nancy Hartley

Is there any way we in our colleges can become part of the Myers-Briggs research through some effort that is already under way?

Mary McCaulley

If you mean, can you send your answer sheets to the Typology Lab to be scored free, the answer is, No. I can't get mine done free either. Mrs. Myers has sort of "adopted" the University of Florida. For some years she has wanted to answer some very important questions for those of us who are on the firing line. Is there any way of telling whether a person has all the assets of his type -- good perception, good judgment -- or is he still not quite so developed and does he suffer more of the liabilities of his type? Because each type has its own hot water that it gets into. Certain types just naturally have no trouble with rapport and other types really have to work at it. Mrs. Myers has helped us develop a computer program to try to answer some of these questions. Our program costs a dollar because we are storing additional information we will later be able to make available to you who are doing research.

Paul Graham

Florida community colleges together with the University of Florida contribute to a joint effort of institutional research. To my knowledge none of this effort has been directed to allied health. I would like to see a priority given to this kind of research.

Question

I have a question for Dr. Koch which relates to what Dr. McCaulley was saying. Is there pressure at the national level to move toward performance tests in some of these fields rather than written tests? I use as an example an emergency medical technician program: beautifully done, a tremendous course . . . and what do they do? They test the guy with a piece of paper and pencil. They don't care whether he can put a splint on a leg or not, or whether he can stop a head from bleeding. The sole criterion for getting a certificate is what he can put on a piece of paper. That can make the difference in whether you pass or fail if you've got a language problem. I had a Cuban boy. He could really stop the blood from flowing, *but he could not read well, so he flunked.*

Moses Koch

The only progress I know of is what the National League of Nursing is doing on an experimental basis.

Question

Tell us more about the book, so we can buy it.

Moses Koch

It is published by the Student American Medical Association (SAMA), 1400 Hicks Road, Rolling Meadows, Illinois 60008. And the title of the book is simply A handbook for change. It was obviously an effort on their part to improve medical education, which they're not very well satisfied with. The price is $2.00, $1.00 for students.

PARTICIPANTS' CONCERNS AND SUGGESTED SOLUTIONS
A BILL OF PARTICULARS

Albert A. Canfield, Ph.D., Human Synergistics, presiding:

An hour this afternoon was scheduled for discussion. I think it is obvious we will not have that much time. I regret this, first, because of my own feelings about the importance of getting people involved in discussing issues and, second, because of a comment I heard, at one of the breaks in one of the small rooms with a great deal of porcelain furniture. Someone said, "This is an interesting conference. Two months from today we'll get the printed proceedings with copies of the speeches and there will be no action plan." And it made me wonder: Why is it like that?

I have learned a lesson from two meetings I have participated in. When I was at Oakland Community College, I was invited to speak before a high school group. While I was trying to fathom the hostility I already sensed, one person said, "Do you realize you're the first person from any community college who has set foot in this high school? And this high school is located eight miles from your campus!"

Before I could stutter a response, another person in the group said, "Get off his back . . . I've been in this school system 15 years. It's the first time I've ever been in this high school, and I teach in a junior high school in the same system."

The second incident happened when a group of community college leaders tried to identify speakers for a program. The standard list of names grew longer until finally one young community college representative said, "I'm getting fed up with the fact that when we have a conference we say, 'All you university people come and play big brother and we'll sit here with our hands folded and wait while the truth falls from your lips.' Half of them have never been in a community college and don't know what one is like. Why don't we have our own speakers?" There was a great resurgence of conviction, but the following year's program had the standard list of university experts.

Here we are at it again. We invite the community college people to come, and big brother stands up and lays on all the truth and wisdom. If you are not getting sick and tired of it, you should be. But I insist we start finding ways we can cooperate to accomplish some things in health occupations education, and quit playing "speech games" and "conversation games," with no action. So will you take a sheet of paper and write down what you personally think are the five biggest obstacles to better articulation of community college and university programs. Then turn your paper over. On the back, write what you think should be done to overcome the one problem you think most important.

COMPOSITE OF CONCERNS

1. Communication between educators of health related personnel in vocational, technical, and university programs is virtually nonexistent.

2. University faculties, having little knowledge of what community colleges have to offer and little interest in finding means of articulating, tend to look down on community colleges.

3. When university educators ask community college educators for input, suggestions are ignored.

4. Both community college and university educators are guilty of planning without consulting the other, and neither utilize feedback from graduates.

5. A need exists for sharing resources, particularly money, people, and research.

6. Neither community college nor university educators are making a concerted effort to solve articulation problems, to bridge the gaps that exist.

7. University educators, on their academic kick, are unrealistic in evaluating the transferability of credits. They fail to recognize the role of technical education in society and to look at the individual student on the basis of his own competencies rather than on the basis of a blanket regulation. Assessment of a student needs to be made by the college to which he is applying, not by the university admissions office.

8. It is difficult for educators to become change agents when the educational system is not conducive to change. Legislators and state board members are as reluctant to experiment as are administrators and faculty.

9. Officially, an articulation agreement between junior and senior

institutions exists, but a student who attempts to transfer finds almost no acceptance of the pre-university education he has had.

10. Neither university nor community college programs have clearly identified goals, needs, purposes, or objectives.

COMPOSITE OF SUGGESTED SOLUTIONS

1. Interdisciplinary and interinstitutional communication can be enhanced by conferences such as this.

2. We need joint planning committees of personnel from universities, community colleges, vocational schools, and industry.

3. Get a community college-university task force to establish a concerted action plan -- tomorrow!

4. Arrange for exchange visits between community college and university personnel in order that both groups may better "get the word."

5. Arrange for faculty and administrators -- not just administrators -- from secondary, community college, and university programs to sit down and discuss their problems. In this way we find hidden talent and gain information.

6. Identify the real requirements for proficiency or success in a given field, realign the curriculum to match the requirements, and articulate the curriculum within the state's educational system.

7. A semi-authoritarian form of leadership may be needed to bring about meaningful articulation.

8. The various kinds of educational institutions in the state should "cross fertilize" each other, to enhance mutual respect.

9. Educational institutions at all levels should assume responsibility for helping the student go as high as he wishes up the academic ladder he has chosen.

10. The universities should exempt community college faculty from the usual criteria for entrance into advanced education: The possessor of a baccalaureate degree and a record of successful work as a practitioner should be allowed to enter graduate school without the requirement of the Graduate Record Examination (GRE).

COORDINATIVE CONFERENCES FOR ALLIED HEALTH PROGRAMS

Kenneth G. Skaggs, American Association of
Community and Junior Colleges, presiding:

In a recent conference of the American Association of Community and Junior Colleges with The Commonwealth Fund of New York, Dr. Newton, president of The Commonwealth Fund, expressed great interest in what universities are doing across the country in reaching out and coordinating their work with community colleges. As he looked at the allied health field, he said, "You know, here are the junior colleges doing a tremendous job in allied health in terms of education and here are the universities, especially through the schools of allied health professions or studies or whatever they may be called in the individual universities, also doing their job. Are the two getting together? Are the universities and the community colleges getting together for a mutual sharing of some of the issues and problems in allied health?" And he said, "I think this is a very important step." So we received some funding (I believe he called it "exploratory funding") to conduct a study this year to determine how universities and community colleges could share resources and provide leadership in allied health education for their geographic regions.

Several universities in the country were already beginning to work toward this kind of cooperative effort. The University of Florida had already established coordinative relationships in education with Santa Fe Community College. Southern Illinois University had brought into a consortium the community colleges of the south central part of Illinois and were attempting to set up some kind of coordinative measures into which they could share resources. The University of Illinois's School of Allied Health Studies was also developing a consortium of institutions under some funding which they had obtained, but were wanting to move more deeply into this kind of planning. The State University of California at San Diego had also begun some work with California junior colleges. Arbitrarily, because we were limited both in time and in money from The Commonwealth Fund, we established these four institutions as pilot institutions in trying to determine if we could bring community junior college people and university people together to talk out their mutual problems and to perhaps develop leadership for the states or the regions which they served. The University of Florida is hosting our first workshop of this sort.

Now what are the main goals of our work here? I suppose I oversimplify if I tell you that perhaps the main goal of the conference is just to bring you together in the same room, talking about the same things, so that you can fuss at one another, so you can lay out your problems before one another, or at least talk together. Hopefully, this meeting will provide the impetus that allied health programs in Florida need to further their coordinative efforts. Necessarily, again because of budget and other considerations, we have had to restrict this conference to those invited, and we selected a kind of geographical line -- Florida community junior colleges north of Interstate 4 and east of Tallahassee. Now, you will say -- how did we arrive at that boundary? Please don't press me too much, but we had to do something to bring in the invitational group and to restrict the size of the conference. We hope, of course, to expand this program to other universities and community colleges. But we really are trying to find out in what ways educational institutions can share resources, work together, plan together, and work on mutual problems. Yours is one of four such meetings that will be held across the country; this is the first meeting.

HEALTH CARE DELIVERY AND EDUCATION FOR HEALTH CAREERS
A COMPLEX RELATIONSHIP

Robert E. Kinsinger, Ed.D.
Vice-President for Programs
W. K. Kellogg Foundation

In 1965 I wrote a little pamphlet for the American Association of Junior Colleges called "The Education of Health Technicians," in which I contended that we needed allied health personnel in great numbers across the United States and that two-year institutions had the potential for developing allied health training programs. Although I have not reread the pamphlet for a number of years, the other day I had occasion to look up some material in it; I was horrified at some of the things I had said. Many of my predictions have come true, but in excess. I think perhaps that we have gone too far.

In a more recent publication, for the *Journal of Allied Health Professions*, I indicate my concern over the proliferation of health technicians. In some pilot efforts, the W. K. Kellogg Foundation backed the development of the associate degree nursing program throughout the United States. We also provided for pilot programs in the dental

Revised from Robert E. Kinsinger, What this country doesn't need is a left carotid artery technician, or A career-based response to the "new careers" scramble, *Journal of Allied Health*, 1973, 2(1), 10-15. © 1972 Charles B. Slack, Inc.

auxiliary field and underwrote other programs. With the great rush to develop programs across the country, we got to the point that community colleges were developing programs almost daily. Suddenly we woke up to the fact that there were not enough instructors to handle these programs. And so, we developed what you are familiar with now -- the Allied Health Instructional Personnel Center. The University of Florida has one of them. There are six other such programs in the country and efforts are being made in these centers to develop an adequate core of instructional personnel to serve in all allied health programs, but particularly in community colleges.

My concern over the proliferation of very specialized kinds of programs is being attacked in a number of ways. And we at Kellogg continue to underwrite a few of these programs, for a core and cluster approach. Some of you have heard me use this bit of doggerel before, but I think it describes the conflict that we face today between education and the delivery of allied health programs. There was a dachshund once so long he hadn't any notion how long it took to notify his tail of his emotion. And so it happened that while his eyes were filled with woe and sadness, his little tail went wagging on because of previous gladness. There is an unrealistic gap between what a graduate functioning in a health field is taught in terms of the skills and knowledge that his instructors believe prerequisite to a career and the kind of professional resources that his employers feel he should be able to draw upon as he functions in the field.

Why, after all these years of general awareness of the problem, do we still find so many hospital administrators, chiefs of staff, head nurses, individual physicians, and other health personnel employers passing critical judgment on the employee sent to them from the colleges and universities? Why do faculties so frequently wring their hands over the inappropriate way in which allied health personnel are utilized? In my view, the dilemma can be traced to a legitimate but rather narrow mind-set that afflicts, in opposing ways, both health employers and health personnel educators.

The health employer sees his role in terms of providing efficient, effective health care and seeks employees who fit most easily -- with the least disruption -- into the system he has devised for delivering that care. Any employee who does things differently or suggests improvements upsets the routine and thus is not properly prepared to carry out the employer's objectives. This only slightly exaggerated attitude of many employers argues for maintenance of the status quo. However, from the employer's standpoint, it is eminently logical.

Such a policy is supported and strengthened by an endless series of research and study projects which observe and measure what allied health personnel do on the job. These observations and measurements are turned into a discreet series of tasks and are analyzed according to the skills and knowledge needed to perform these tasks.

All of the data thus gathered are transformed into behavioral objectives which become the starting point for classical, occupational, educational curriculum building. The procedure is logical, rational, and not very imaginative. It is based on the assumption that the way health care is being delivered today is the best way, and further, that it will always be done that way.

At the other extreme are the educators who are sure that there is a better way to deliver health care. And, although they have not elected, or perhaps were not elected, to take administrative responsibility for the delivery of health care,educators seek to bring about change through innovations in their own fields. Thus graduates are not prepared so much for the role their future administrators see for them, but in terms of how educators feel their graduates should function in an improved health care system. I say this in spite of the fact that I applaude the kind of program and the kind of effort that Dr. Hamburg spoke of this morning. It seems to me that if you do not take the kind of initiative that he was talking about in describing the dental auxiliary program wherein he is thumbing his nose at the establishment to some extent, we are going to continue to support the status quo. But having said that, I have, admittedly described two extremes. The sterotype employer looking for the unimaginative but steady worker -- he is a status quo seeker--and the educator teaching service roles, not as they are, but as he feels they ought to be -- he is a purveyor of unreality. Some aspects of these two opposing positions, however, are generally at the heart of most allied health employer/ educator disagreements. Challenged, both groups will agree that health service must change and improve and that there must be a close correlation between the performance an employer expects of a graduate, and the graduate's ability to perform according to that expectation.

Now I propose a middle ground. In determining manpower needs, survey questions must be directed to consumers or consumer representative bodies, as well as to employers. Market demand, not just a survey of need, must be known. The basic concern must be the consumer's ability to secure both health maintenance and health corrective services easily and quickly when necessary, and at a reasonable cost. We must start from where we are with the basic work force of physician, dentist, nurses, and traditional allied health workers, including physical and occupational therapists, dental hygienists, and medical technologists. Extending and modifying the services professionals provide will require technicians with a career base -- that is, technical health workers who have a broad background in both acute care and health maintenance problems as they apply to individuals and their life styles, and also a grounding in health care fundamentals that will make them valuable as service extenders for many of the professionals who must continue to provide leadership.

With such a background, the technician can serve a physician, a dentist, a nurse, or a therapist as required and as service dictates. Technicians thus trained cannot be expected to be skilled as diagnosticians, therapists, or deliverers of a high order of manipulative skills. These will continue to be the province of professional practitioners. However, a health technician with the sound training of a career base can be a service extender in the areas of patient teaching, initial screening, and repetitive skills. The technician should be prepared to serve wherever he is most needed as determined by the demands of the situation and by the perception of the professional who seeks to spread his own services more effectively.

Such a system will require more leadership from professionals. Further, it will require a more highly developed plan for continuing education and constant review to determine who needs what service and when.

The challenge seems almost overwhelming, but so are the flaws in the present system, which relegate the radiologic technician, for instance, to serve the radiologist forever although the health needs in his geographic area may actually indicate a pressing need for assistance to professionals in laboratory medicine or public health functions. With the advent of Health Maintenance Organizations (HMO's) and other health delivery systems, the health technician must be equipped to adapt his function. The system must change, will change, and if we are not preparing personnel that have the kind of background that can adapt to the changes, we are doing a disservice. Such a system utilizing broadly prepared health technicians would help avoid the limiting boxes in which so many technicians are confined because their training enables them to serve only one type of practitioner, regardless of local health needs. It would avoid guild-system complications, and it would open the door to the long-sought career ladders for health technicians. Health technicians with career-based training could move into those roles most needed at a particular time, their careers limited only by their individual aptitude and motivation. Such a system would challenge the professionals as never before to effectively utilize assistants, and it would certainly make greater demands on educators to offer not only a different type of basic education, but greatly enlarged and highly flexible continuing education programs.

How then can the educational system for health technicians begin to implement the modifications I have suggested? The answer probably lies with current efforts across the United States to prepare a new core of allied health faculty wedded neither to turning out health workers in their own image nor to preparing students by the same training techniques they experienced in gaining their own basic skills and knowledge. This, I hope, is happening at the University of Florida, at the

University of Buffalo - SUNY with Warren Perry's program, with the program Dr. Hamburg represents at the University of Kentucky, at the University of Illinois at Chicago, at the University of Washington, at the University of California at San Francisco, and at the Baylor Medical Center. These centers provide hope for changes in the way faculty are pursuing their jobs. Hopefully these allied health instructors and educational administrators, being exposed to the heretical educational philosophies, at least debated as part of the curriculum of an Allied Health Instructional Personnel Center, will begin to breathe new life into allied health curricula. The few and often lonely allied health faculty members and administrators who have sought for years to persuade their colleagues to adopt new curricular approaches are currently being joined by new allies in their efforts to revise and update allied health education.

Such a drastic revision of the approach to the preparation and utilization of allied health technicians will require great changes in the ability of professionals to use technicians imaginatively and more effectively, but the basic educational task in and of itself will be monumental. Faculty roles within schools of allied health professions will need to shift substantially. Faculty members must recognize that education is more than those with knowledge lecturing those lacking knowledge. They will need to concentrate on their responsibility as thoughtful analysts of the health delivery system and place particular emphasis on the way health technicians can be utilized most effectively to serve the health requirements of the public. They must concentrate on their role as student counselors and learning specialists, seeking out, and, when necessary, developing autotutorial materials for students. Clinical experiences for students must be more carefully analyzed and sought in ever-changing settings, in keeping with the modifications in health delivery mechanisms that are surely just over the horizon. Above all, and I cannot overemphasize this, educational planning must become a continuous joint effort by instructors and practitioners.

How do educators find time for these new roles? I think they do this by giving up much of their traditional and time-consuming activities as lecturers and testers. A procedure well demonstrated just once will suffice for years. Of course, the performance must be captured on videotape and made easily available to students, but it need not be repeated by an instructor until some time in the future when advances in health science dictate modification. Measurements of student achievement no longer need occupy vast segments of the faculty member's time. The College-Level Equivalency program and all of the many efforts of Educational Testing Service (ETS) and other groups to provide us with nationally normed and developed achievement tests should soon provide a uniformity of expectations regarding skills and knowledge of graduates in certain fundamental areas. A real concern these days is the proliferation of the physician's assistant program, and there is of course, no uniformity to these programs. It is a problem to figure out how you get uniformity when you have a hundred programs, each started at someone's whim. The National Board of Medical Examiners is currently developing a test battery that will be quite similar to the State Board test pool that nurses have had for so many years. We hope by using the test battery to be able to develop some uniformity among physician's assistant's programs. Using these kind of techniques should in turn free the instructor from long hours of developing, administering, and scoring tests.

Of course, bringing educational programs and health delivery systems into greater harmony involves much more than a revision of the educational process and regional accomodation with health service agency employers. We need to work with all groups involved, not just educators. For example, one of the most highly respected groups in the country is the Committee on Economic Development (CED). This group has developed some important policy statements that have been followed not only in business and industry, but also by the government. The CED is not a health group. Because it is a group looking at health care delivery from the outside, its conclusions will probably have more impact than will the opinions of those within the system. I think all of you recognize that changes coming about in our various professions are almost always forced from the outside, and I think changes in the delivery system will be forced upon the professions from the outside just as Medicare was forced upon the American Medical Association. Last week the CED issued a report that is the culmination of two or three years work, entitled, "Building a National Health Care System." This is what the committee has to say, "There's a great need for a national health manpower policy to replace the present fragmented and spasmodic training of personnel. To stimulate training without a national plan could continue to produce more specialists of some kinds in a single city than the entire nation may need. Manpower may continue to be misused. As is now increasingly evident, more manpower by itself will not curtail the cost increases unless the delivery system is improved. Under foreseeable conditions, national health manpower policy should be designed with the intent of developing the requisite personnel and skills to (1) alleviate certain general shortages, (2) overcome the geographic maldistribution in inner city and rural areas, (3) provide primary care, and (4) staff the new delivery systems which will be operated to a greater extent by allied health manpower. The fundamental need is for a large increase in the number of allied health workers, and in the actual delegation of responsibilities by physicians to capable and appropriately trained assistants." There is nothing startling about that; we have been saying the same thing among ourselves. The importance of this quotation is that someone from the outside has come to the same conclusion, and people like this make things happen.

So I think that we will be seeing even faster developments in the near future. As educators operating most often within a regional framework, we may not be able to effect a change in national policy as suggested by the CED study; however, there is available to most a mechanism which should be supported and used -- comprehensive health planning (CHP). If the system is not working effectively in your area, there is every reason to take personal initiative to see that it becomes functional as a neutral device for bringing health career educators, health service providers, and community leaders together to work toward systematic central planning. Properly developed, an areawide CHP agency should function as a central clearinghouse to coordinate the goals, data collecting methods, and overall design of individual efforts. Such an agency could facilitate the kind of continuous dialogue that must go on between educators and employers and could integrate the many efforts that should be focused on a single goal -- improved health care. From my position in the foundation I have become concerned over a multitude of activities, all designed toward a single goal, but not coordinated, not using a mechanism such as comprehensive health planning. Frequently I become the middleman. Someone comes in one day and tells me about something. The next day a man who is working the same region of the same state is, in many cases, duplicating to a large extent what the first man is doing.

Neither has anything to do with comprehensive health planning. Each is highly motivated, competent, doing a good job, but both are utilizing resources in an inefficient and ineffective way.

I plead with you to use the kind of coordinating agency that we now have available. All of those sharing this goal should be able to focus their attention on common problem areas, such as mobility, certification, and remuneration. Career mobility is affected laterally, horizontally, and geographically by the degree of agreement and acceptance of training and certification. Individual training programs in a region should be coordinated and brought into association with commonly agreed upon goals and objectives worked out between educators and employers. There must be strenuous coordinated effort to prevent creation of dead-end jobs, overspecialization, and training of non-employable personnel.

How do you get a policy implemented? You get it implemented when you have enough clout, and the clout usually comes from resources -- monies to underwrite programs or monies withheld from programs that should not be started. Such clout often comes from legislators. I sincerely believe that if you are going to make the kind of impact that you should be making on health care, you need to be a politician in the best sense of the word. Do you know your legislative representative? Have you made yourself known to that representative? Simply to say, "If you ever need any information about the allied health field, if you need data, if you need to know what is going on, I am offering my services. Telephone me or drop me a letter, and I will put all the resources I have available at my university into getting you the kind of information you seek as you try to decide about legislation." I think you have this responsibility. If you do this and deliver on it, you are doing some of the most effective lobbying. If you do not do that kind of lobbying, our present health care system will continue to proliferate, and we will only be able to come together and shake our heads over it.

If health personnel educators limit their interests and devote all of their energies only to training their own students, we will move very slowly, if at all, toward the goal of better health care. If, on the other hand, these same educators reach out to coordinate their efforts with other training programs, employers, health professionals, community leaders, and legislators, the public will be served with the kind of health care to which all of us have in one way or another dedicated our professional careers.

COMMENTS

Question

Is information available for those of us who are trying to set up first a core course and later a core curriculum?

Robert Kinsinger

Some of you may have attended one of the four meetings being set up around the country to describe a core semester that has been developed over a period of three years. Among other findings so far is that attrition has been cut by about 20 percent. This is a program in which all students enter as health career students. They don't enter as nursing students or as radiologic technology students or medical technology students. They simply indicate that they know they want to go into a health career. Many of them may have decided they want to go into nursing, but in the first semester they take a program which has a general anatomy course, some other general education, and an introduction with clinical experience. They are rotated through some clinical experiences in the seven allied health programs offered by the community college. At the end of the semester they have an opportunity for counseling. Now they know what they are getting into, what skills and knowledge will be expected of them. They know a little better where their aptitudes may lie, what will be involved. The instructors also have had a chance to evaluate the aptitude of the student. Together, instructor and student select the student's program. This opportunity for a better career selection has changed the attrition rate, has increased scores graduates are getting on state boards and other examinations. It's amazing, the results that have been obtained. The student who elects the nursing area, for instance, and goes into practical nursing, will go one more semester, then take the practical nursing examination. The student who decides on associate-degree nursing will go three more semesters and take the examination. Anything accomplished in that first semester applies to the later program. Those who are developing the program took a workshop to California. Some 50 people attended. A month later, as a result of many queries, the California sponsors requested a repeat presentation for those who missed the first one. That's how excited they are about this program out there. So after all our preaching all these years -- mine and all *of yours who are interested in the concept of a core curriculum -- I really think we may have something going now. At least I'm encouraged.*

Warren Perry

Bob, may I add to that report a mention of the Carol Burnett study for the Association of Schools of Allied Health. The fall 1973 edition of the Journal of Allied Health will be devoted completely to "core." Responding will be administrators, educators, students, and others. What does core really mean? We are doing a whole issue just on core, and a representative of a community college -- the Kellogg Community College -- will address himself to this core also.

Robert Kinsinger

You blew my cover. I tell you why I'm embarrassed about that. When people ask me where I think the most exciting thing is going on, it's very embarrassing to say, "That little college right next to my office is the place I see the most exciting thing." But I have looked at programs all over the country and -- unfortunately because it looks so parochial -- that is the place. That's why I didn't mention the name. I was referring to Kellogg Community College . But a number of places have been working with the core concept.

A COMMUNITY COLLEGE-UNIVERSITY COOPERATIVE EFFORT

James L. Wattenbarger, Ed.D., Director, Institute of Higher Education, University of Florida, presiding

Florida has the reputation and actual track record of having gone much further in the development of cooperation between universities and community colleges than any other state in the nation. We are proud of the things we have accomplished. But this is not to say that what we have done is perfect, nor is it to say that there is no room for improvement. Our efforts are *not* perfect; there *is* room for improvement.

A recent volume called *The Educational Middle-Man*, by Fred Kinser, describes articulation procedures used in most of the fifty states. The procedures remain very thin in some states, but Florida is becoming, in articulation, a model state. The out-of-staters among you may not be aware of the fact that Florida has an articulation agreement which has a fifteen- or sixteen-year history. It states explicitly that universities must accept community college transfers with associate degrees; it makes special provision for students who have not completed the associate degree and also for students who have finished associate in science degrees, as well as associate in arts degrees. Florida has not, however, accomplished much in giving people credit for experiences other than those in the classroom setting, but this past year it has taken steps in the right direction by accepting CLEP tests as basic transferable credit from community colleges to universities and from university to university. I am certain that other such improvements will follow as Floridians continue to define the problems. However, my own personal experience leads me to believe that a student faces as many roadblocks in transferring from one junior college to another as in transferring from a junior college to a university. In fact, I have met a number of students who have moved from one junior college to another and have "lost credit" in the process. This, of course, never occurs when they come to the University of Florida, you all realize!

The university's responsibilities and cooperation involve matters in addition to the acceptance of credit and the development of connected programs for students who continue beyond their second year in college. Two University of Florida deans have come this morning to discuss with you ways in which the university can be of more service and ways it is trying to better serve those of you working in community college programs.

THE COMMUNITY COLLEGE - UNIVERSITY COOPERATIVE EFFORT: THE COLLEGE OF EDUCATION AS A RESOURCE

Bert L. Sharp, Ed.D.
Dean, College of Education
University of Florida

Yesterday's program on the education of health professionals was an informative one for me. I will repeat some of what I heard to see if I heard it correctly.

Someone has looked ahead and is predicting the end of the health manpower shortage. But when will that be? How rapidly is that end coming? I assume that the end is seen in view of present staffing patterns and present health care delivery systems. Others say there is a job to be done beyond simply supplying manpower for health care delivery as we have known it in the past or as we know it today. I am not certain what the changes will be, but someone indicated an opportunity for something new in health delivery and something new in the training of health manpower. Health care must be made more comprehensive. It must shift from emphasis on caring for the sick to emphasis on well-being and to education of the public about the care and maintenance of its health. A shift to more interdisciplinary teams for the delivery of health care is indicated. This means a shift away from increasing numbers of specialties and individual specialists to a more comprehensive delivery system. All of these suggestions have tremendous implications for health manpower education.

These issues hold implications for health professionals already practicing in the field, as well as new professionals entering in the future. Increasingly, it seems to me, the key to this change will be by education. Education might be seen as a "beginning to start" practice and much of the education and training for students would be viewed as means to commence this practice. Thus, education of the professionals becomes a life-long activity. We have seen this take place in teacher education. The limited time students are with us in baccalaureate programs is increasingly inadequate preparation for teaching or for other professional careers. All we can do is provide enough to "begin." If all we can do is give allied health students the tools to begin to practice, the education of health professionals, like that of so many others, becomes a career-long process; as long as the person practices, his education must continue. If this becomes the career development pattern then the education of a professional or clinician is viewed in an entirely different way.

Those in vocational education have heard much about career ladders with their stair-step effects. Somehow, educators must find ways to identify skills essential in beginning practice and, then, ways to add additional skills as one climbs the ladder to further career development.

The larger task facing the health professions educator over the next several years will be the reeducation of currently practicing persons. I am reluctant to call it retraining; that implies inferiority, that the person is incompetent so he must be retrained. But there is an increasing necessity for people to have the opportunity to update their skills, knowledges, and attitudes. For such change to take place, current practitioners must be involved. Without their support and cooperation, the changes we try to effect will be slow in coming about.

Interesting and promising changes in the content of the clinical specialty are ahead. No doubt some training experiences are common to several of the allied health professions. Last night, Dr. Kinsinger referred to these as the core program and the core approach. In education, we are now speaking of these as generic competencies -- common learnings and skills that cut across disciplines. To identify common learnings and to teach them in an integrated fashion makes sense if for no other reason than economic efficiency.

When I worked in the public schools, I found that high school guidance counselors, school psychologists, school social workers, visiting teachers, and others in the helping areas had great difficulty in working together. Although they could all be termed "helping professionals," the school guidance counselor worked in his own way and his own shop, the psychologist in a different manner, and so on down the line. It was interesting to ponder why it was so difficult to get these people to work together as a group. As long as I was one of the practitioners, it was no problem because I worked alone. It was only after I became an administrator and responsible for all of these groups that I became concerned as to how to get them to form a team. How do you get a team to operate? Each of these persons felt he had to do "his thing" and no one else could do it; this situation exists with some allied health personnel. If people are trained together, might they work together more effectively as a team?

If changes are to take place in education in the prepracticing phases as well as the practitioner or continuing education phases, changes must occur in the educational programs for allied health educators. These changes must occur in the junior colleges, high schools, and universities; perhaps this is what Kellogg has seen in supporting the seven centers around the country.

What will some of these changes be?

Last night, Dr. Kinsinger stated that the health educator must be more than an outstanding clinician. He must be an assessor of student strengths and student achievement, an evaluator of programs and curricular effectiveness and efficiency, and a program-builder who can develop curricula that will result in desired changes in the learning. This is not to deemphasize the importance of clinical skills and competencies but to suggest that something is needed in addition.

I think most public school educators see the importance of the maintenance of good health. We realize the importance of good health to learning and achievement in school. Increasingly, the health professional must be prepared to assume a role in education with public school educators.

Public school educators are not prepared to assume this responsibility without your support.

If public education is part of the solution to the health care dilemma, teachers and health care professionals must work together. If public schools, junior colleges, universities, and health care consumers are to cooperate, all of us here today will have to sit down and develop some kind of model of how this will be done.

Although I do not have the solution, I know it will require cooperation. If the plan is dominated by the medical doctors, it will not work; if it is dominated by any other group, it will not work. It will truly have to be a joint effort. We do not have the experience of working as a team -- whether as a team of health professionals in delivering health care or as a team of health professionals and educators working together. We do not have many models but I should think it is time some of us turn our attention to finding a strategy or model.

What can colleges of education do? What can universities do? An openness of mind about the possibilities for change and what is implied with change must exist first. We must begin to look at the possible changes that are going to be brought about and their consequences. What implications will these changes have for the preparation of teachers, for the preparation of health educators? Colleges and universities are the key: they control the gold standard in academia -- the college credit and the degree -- which is still a valuable commodity and a useful standard. Colleges and universities are in a position to slow down or impede change, the change we have agreed will and must come. If the gold standard is not as versatile as it needs to be, a new standard must be developed. Any new standard must be just as useful as collateral when a person transfers from one college to another, as when one transfers from the university to some form of certification or licensing.

I prefer that we not create a new standard. We should, instead, examine the changes which may be made with the existing one. Some universities have made much more progress than others, but I think there is a willingness, generally, for the University of Florida and a few other universities to look at what is legitimate under the standard of college credit. Someone said that it is now legitimate to train occupational therapists by sending them out to work with young children with learning problems instead of using the traditional classroom instruction. Credit for field experience is probably one of the most promising things to come.

There are additional kinds of credit. Dr. James Wattenbarger mentioned CLEP, which counts what a person has already learned through practice and instruction toward college credit. Other innovations will also force a reevaluation of the standard. Performance-based education really puts the emphasis on performance, not upon instruction and teaching. Its key questions are, "Can the person do it?," "Does he know it?," rather than "Has he spent time in a particular situation?" Not all education should be performance-based but a major portion of it can and probably should be; a performance-based system encourages changes in the existing set of standards.

What evidence will universities and colleges accept for achievement? Much rethinking must be done in this area. Some of the assessment and measurement devices are fairly crude. Development work has to be done in all phases of education on the matter of achievement assessment. If education is the key, then professionals in the universities and colleges must help develop a strategy to involve those significant others in charting the future educational needs of health care professionals. We must encourage consumers, practitioners, employers, and educators to become involved in identifying problems and finding solutions. Daring individuals willing to stick their necks out are needed -- we have been rather conservative in the past in what we were willing to do. When institutions and educational systems go through rapid growth periods, they become so concerned with the problem of taking care of numbers that they spend little time in seeking other educational alternatives.

A vice president of our university uses the expression, "steady-state universities." If we are approaching steady-state -- no growth situations in higher education (including the junior colleges) -- perhaps this is our opportunity to look at alternatives for new services to be given; to consider new tracks designed to enhance the personal and professional development of individuals.

We have reached the point where numbers are not our greatest problem. We will make a tremendous mistake if we continue to view universities and colleges -- those segments of our society which hold the gold standard -- as institutions to keep people away from education rather than institutions for more and further education. We must be the providers -- capable of developing the potential of all individuals.

THE COMMUNITY COLLEGE - UNIVERSITY COOPERATIVE EFFORT: THE COLLEGE OF HEALTH RELATED PROFESSIONS AS A RESOURCE

Howard K. Suzuki, Ph.D., Dean
College of Health Related Professions
University of Florida

In order to implement career mobility, the College of Health Related Professions must serve as a resource to community colleges on two levels. First, it should help community colleges develop curricula and programs. Second, it should develop a program that permits associate of science health technology students to work for a baccalaureate degree with minimal loss of time and credit.

The college should be looked upon as an available resource to help community and junior colleges develop course content and programs. For example, members of our medical technology faculty have been serving as consultants to Miami-Dade Junior College, working with Miami-Dade faculty to develop a medical laboratory technician curriculum which will integrate with Florida International University's medical technology program. In another profession, the same medical technology faculty have been serving as consultants to Miami-Dade's optometric assistant program. In the latter case, they serve as consultants on development of curricula, not as experts in the practice of optometry.

The faculty of the College of Health Related Professions should serve as a resource in making recommendations as to the feasibility of developing innovative programs. "What this country doesn't need is a left carotid artery technician; or, A career-based response to the 'new careers' scramble," an article by Dr. Kinsinger in a recent issue of the new Allied Health Journal, delineates the rather rapid, uncontrolled development of the new "health careers" which often demand only a few narrow skills.

At the second level of input, the university needs to develop a program to help community college health technology students who wish to further their educational goals and career aspirations.

The associate of science degree is a technical terminal degree whose primary purpose is to train an individual to be proficient in a particular vocation. The curriculum, then, places heavy emphasis on technical and practical courses, not always considered to be of sufficient academic content to be transferable to some traditional university program. Approximately 5 percent of the students completing the technical degree with an associate of science and/or associate of arts degree wish to work for a baccalaureate degree and to continue for a master's degree. Although they do not originally intend to continue their education beyond the associate-degree level, after some work experience, they express a desire to continue to work for a bachelor's degree. Because their associate degree has a high percentage of technical courses, not recognized by the university, these students face difficulty in gaining entrance to a number of senior universities without significant loss of credit. The College of Health Related Professions proposes to develop a program which will offer them a means by which they can earn a Bachelor of Health Science degree. With a 5 percent figure, the university could expect 50 interested students in a population of 1,000 health technology graduates. It could design a curriculum to accommodate 50 students per year.

This program would make available several options: First, an education track. This would be designed to help the student fulfill the basic requirements to be eligible to teach in community or junior colleges. Second, a supervision and management track. Thus, an associate of science x-ray technologist could receive additional educational experiences qualifying him to become a supervisor in a radiologic clinic. This could be considered a type of specialized training in middle-management administration. Third, a specialized management track for administrators of nursing homes and extended care facilities. Fourth, a financial management track for middle-management administrators in hospitals and other smaller health facilities. Fifth, in health technologies such as radiologic technology, a curriculum with strong emphasis on theoretical aspects of physics, radiology, instrumentation, etc., so that the individual would become more knowledgeable in his own technical field.

The following criteria and parameters are being designed into the program:

1. The student should be highly motivated and should have at least two-years' work experience following the granting of his associate degree. This provides time for practical experience and maturation.

2. We may be forced initially to limit acceptance of students to the more traditional health technology programs such as respiratory therapy, x-ray technology, etc. This would rule out some of the more innovative and specialized health technology programs. We could not justifiably accept students from health technology programs that are new and have not had the chance to be properly evaluated by formal and informal processes.

3. Credits earned toward the associate of science degree should be accepted in their entirety by the university. Since a student receiving an associate of science degree usually has taken few general education courses, these courses will have to be taken during the junior and senior years, and may somewhat limit the number and scope of electives.

4. Students will be selected, in all probability, on the basis of factors such as their previous academic record, clinical experience, leadership abilities, motivation, and career goals. Before they are admitted into the program, students will be asked to decide which special option they will pursue.

How do we develop a practical curriculum option, such as the education track, for a specific associate-degree health technology program?

Preliminary discussions have been begun with Dean Sharp in basic education courses to meet the community college certification requirements. The College of Health Related Professions could offer most of the general health-related courses and could serve as the counseling base for the students. Enrolled students would be eligible to take courses in other colleges as necessary. The university has fifteen diverse colleges whose resources could be tapped when needed.

The education option, then, would be a joint effort of the Colleges of Education and Health Related Professions. The diploma could recognize such joint efforts.

This Bachelor of Health Science program for enabling health technology students to take advantage of vertical career mobility has exciting potentials. The College of Education faculty would provide students with basic teaching principles, while the College of Health Related Professions would provide knowledge in the perspective of health care, etc., and would be an academic home for the students.

In summary, the College of Health Related Professions is moving positively and affirmatively in the direction of making the vertical career-ladder concept a reality.

COMMENTS

James Wattenbarger

Here is an excellent example of what we can do when we start to give attention to problems allied health students have in continuing their education. I hope we would not limit our viewpoints, though, this morning to programs for students. I think we might spend the remainder of the time in this period discussing other ways in which universities can and should be cooperating on health related education we see for the future.

Nancy Hartley

How many people on the planning committee for the Bachelor of Health Science program are teaching in or enrolled in health related programs in junior colleges? And how much input does the person who needs this education have in the planning of these courses?

Lowell Hammer

The planning is preliminary at this stage. Many of you will be called upon to help.

We have talked about articulation for many years, we still have not worked well together. I hope this conference is a step in that direction.

Margaret Morgan

Three members of the committee to develop the curriculum are here. We are trying first to determine what the university will accept from the community colleges in general. No technological area will be considered unless there is input from professionals in the field and from the colleges offering the associate degree programs. Dean Hamburg can speak to the problems involved in the articulation of two-plus-two programs because he went through this at the University of Kentucky two years ago and again one year ago.

Joseph Hamburg

We in Kentucky are fortunate to have a community college, euphemistically termed the Lexington Technical Institute, based directly on our senior university *campus. We gain input from the professional experts at the associate degree level in these allied health areas because they are part of our own faculty. Thus, the business of communication is enhanced and accelerated. We have limited the bachelor of health science degree to those disciplines offered on the Lexington campus. We don't yet have the knowledge to extend it into new associate degree specialties, but we hope to, eventually. When that occurs, we will have to develop new, more comprehensive councils and committees.*

James Wattenbarger

We have another problem, too. There is no way we can graduate someone with a baccalaureate degree prepared for junior college teaching.

Paul Graham

You don't have to prepare them. We will employ them with bachelor's degrees whether they are prepared or not!

James Wattenbarger

Then you have a big in-service training job. Perhaps that is the place where the university can provide you with more resources than we are doing now.

Albert Canfield

Am I hearing correctly, that one cannot teach in a junior college with a bachelor's degree?

James Wattenbarger

I said under present university regulations there is no way that the College of Education can prepare someone for teaching in a junior college at the baccalaureate level. Several reasons for this exist.

First, every accrediting agency I know requires a master's degree. This means the junior college will not hire baccalaureate people. Second, at this time no state university college of education is authorized to offer students baccalaureate degrees that prepare them to teach other than at the elementary and secondary levels. Third, if a student receives a baccalaureate degree for another level, the community colleges say *he is not prepared to teach in the junior college. We have no modis operandi, no legal way to prepare people to teach at the baccalaureate level at the junior college. The suggestion of a baccalaureate degree in health related sciences offers a new opportunity.*

Bert Sharp

We may be given a three-year planning period. If so, we may have to be like Kentucky's dental auxiliaries and begin on our own to cut hard tissue. And whether we are going to cut hard tissue will probably largely depend upon the needs that you can represent to us, the Regents, and the Legislators. Those who sit down to plan -- consumers, employers, educators, practitioners -- that group needs to involve those who have the clout; the latter have to be convinced. How are we going to do this? I am convinced we are not going to do it sitting here in Gainesville -- or Palm Beach, or Daytona Beach -- and we will not do it in isolation.

Darrel Mase

I think it will not be done until the state universities begin to communicate. Each wants something different. Until you can work together you will not have any clout.

THE COMMUNITY COLLEGES AS RESOURCE CENTERS

James L. Wattenbarger, Ed.D., Director,
Institute of Higher Education
University of Florida

My major behavioral objective in the last session was accomplished, I think, because I was anxious for those of you in the community colleges to understand that those of us with the universities are not free agents. We are often more hemmed in and more controlled than you are. In fact, whenever they get together, university presidents in Florida make the same lament: "I wish we could have the freedom in our budgetary operations that community colleges in this state have."

Their concerns are well placed. Community colleges have far more freedom in their operational control and their day-to-day functioning than do the universities.

And I have wanted to get across to you that we cannot offer new degrees in this institution without the approval of the Board of Regents, and the Board of Regents operates nine institutions. You can imagine the kind of attention it can give to each problem in each university.

Furthermore, we cannot even plan a new program without getting permission. If we surreptitiously plan a new degree without getting permission from the Board of Regents, we are violating a basic Board of Regents regulation. We cannot increase our graduate enrollment at the universities because the Legislature has put a ceiling on it. The Board of Regents has the authority to say this institution may do this and that institution may not, so if you have had trouble with some of the institutions in terms of expanding graduate programs, that is the reason: These things have been imposed upon us from without. The only way we can make changes is for you to understand our problems as we try to understand yours and together we can accomplish something. The problems are not insoluble but finding solutions requires, as Dean Mase pointed out, some agreement on objectives and some concerted effort.

This afternoon's session has the interesting subtitle, "We have been presented the problems: How can we cooperate to solve them?" I hope we won't think of these two sessions as being discrete and separate.

The three people who are going to speak to you now are, I think, well known. Nancy Hartley led the way in this state in the development of the associate degree nursing program. To show the kinds of things that have to happen in order to make progress: When Nancy first moved from the diploma hospital program to the associate degree program, the associate degree nursing program at St. Petersburg Junior College had to be a three-year program. About a three-year period of operation was required before the college was able to convert its program to a two-year one. This shows the difficulties we often encounter when we try to bring in new ideas and institute changes. But by the pioneering effort of Nancy and her faculty, we could begin to move into the associate degree nursing program in other institutions. With help from the W. K. Kellogg Foundation we were able to start similar curricula in other institutions, until by now the number has risen to more than twenty. Nancy has become the director of the health related program in St. Petersburg and a leader in allied health education in Florida.

Paul Graham has been instrumental in the development of a number of allied health programs at Palm Beach Junior College. The oldest junior college in the state, it has performed a most important leadership role, particularly in dental and allied health education.

A few years ago we were looking around the country for a person to add to our staff here at the University of Florida. We looked at a number of higher education programs, particularly those related to community colleges, and found a young man named Al Smith. He has been with us for four years now and has performed yeoman's service on our faculty, in relationships both within and outside the university. One of Al's responsibilities is to work with community colleges in the development of field internships. He is also responsible for practica, which are closer to home. This gives him a special relationship to the community colleges and a particular basis for discussing with you some of the ways in which community colleges and universities can cooperate effectively. First, Paul.

Paul W. Graham, Ed.D.

Dean of Academic Affairs
Palm Beach Junior College
Lake Worth, Florida

We have mentioned a number of concerns in the past two days, and I would like to express some of mine.

One of the things we hope university systems will recognize, and this is a quote from the executive director of the American Vocational Association, is that vocational and technical education is a vital part of the total education program of all people and, therefore, must be made available in all types of institutions that offer educational opportunities. I think we said yesterday it is easier for us to come up with new programs than to re-think, re-work, re-vitalize some of the old.

I think many of the resources the university has are valuable as they are. The university does not have the right to train the allied health technician, as we in junior colleges can, but we don't care. The student has gained technical competency. All we ask is that our graduate be sent through the School of Education. Let him earn his bachelor's degree beyond the technical proficiency we have given him. Right now we have six persons on our staff who do not hold bachelor's degrees. I would like for them to have a baccalaureate but it makes no difference to them whether they have it: They know we will pay them the same, because their salary is based on state certification. I think they would be better teachers if they took your education courses, but I don't see that you need a new program. You already have the necessary courses.

It has been said here that the university system is fighting within itself. The community colleges are involved in that competition, too. I like the idea of an appointed task force. I think we can, under Florida's articulation agreement, ask that such a task force be appointed. It would bring together allied health educators from community colleges and universities and serve to inhibit some of the inter-institutional competition that exists.

Competition between universities is undermining our community college programs. You are vying with each other. For example, the Legislature said, "We want colleges to give people credit for what they know, wherever they learned it, and regardless of when they learned it!" So we said to our board of trustees, "OK, diploma nurses graduated from hospital programs. The state recognizes them and lets them practice. In our nursing program, may we credit these students for their technical experience, let them concentrate on their general education, and give them an associate degree?" The board said, "Bless you. Do it." We no sooner had a commitment from one university that it would accept these students than another university said, "Forget the general education. We'll take the students as juniors solely on the basis of their state boards." So competition does exist within the system.

This brings out another of our concerns: We need to plan for program articulation. The planning needs to be external as well as internal. Some of our community colleges are so located that they can share resources with a university. Here, for example, the University of Florida and Santa Fe use the same hospital for some clinical experiences. Several community colleges share psychiatric facilities with other institutions.

Universities and community colleges need to collaborate on other resources, both human and physical. For instance, you have referred to cassettes, tape/slides, computer programs. Have you priced copies of tape/slide units? You create the units here at the university. We have the means of duplicating slides, cassettes, tests. We can work together.

A number of community colleges pay into an institutional research council and have representatives who help determine research priorities. We in allied health need to suggest to our institutional research representatives the kind of research we want done. These are all untapped resources.

We need to consider teaching university educators how to use assistants, as dentists have been taught to do.

And a need exists for another form of program articulation. I have heard that the university is willing to keep its programs flexible and relevant to all levels of teaching. If that is true, why is the residence requirement so strict? If the University of Florida has been accepted as the allied health center in the state, why does the institution not work with some of the universities in other areas, send teams down, approve faculty in other institutions, or do something to give us some of the education we need in our communities. We must swear to the Board of Regents that a course is not available and cannot be offered by a regional university before the University of Florida can even be declared eligible to offer it! A change needs to be made in that policy.

I have tried to provoke a little thinking. Nancy will express some of her concerns; Dr. Smith will add a third perspective; then we hope there will be comments from the audience.

Nancy M. Hartley, M.S.Ed.

Specialist, Health Related Programs
St. Petersburg Junior College
Clearwater, Florida

If I have received no other message from this conference, I have learned that, together, university and community college people can have clout with the Legislature and can begin to remove the state restrictions which hamper us in our work.

First, however, we need to communicate well with each other. So I would like to communicate to you right now some things that have been done and the kind that still need to be done.

About five years ago our junior college felt a model for continuing education was needed. We worked closely with in-service people, directors of nursing, and the hospitals in our county. Through a cooperative effort we were able, first, to get funds from Florida Regional Medical Program. The project had the support of the university. This is what we needed -- our faculty working with the university's clinical resources and people. We in the community colleges tend to get in a rut; you at the university get in a rut. We need to come together. Patients at the university medical center do not provide the same type of patient experiences that students have in clinical facilities in community hospitals or nursing homes. Your students need the latter kinds of clinical experience, and our students need a little of what you have. So we must get faculty together at different levels. There is no communication method set up whereby this may be continued. A framework is needed. Educators from all levels of each allied health discipline need to talk together about clinical training. It is detrimental for a nurse who knows only abnormal situations to come work in a community *hospital where she needs to know about preventive medicine and promotion of health and wellness. Better planning could prevent this.*

The physical therapy assistant program was a pilot program backed by the Florida Department of Education. It also received support from the University of Florida. The head of the university's Department of Physical Therapy and her staff were on the advisory planning committee for the P.T. program. While they learned a lot about community colleges, we learned about the politics involved in their professional groups and about the influence the professional organizations had in getting laws passed for our P.T. auxiliary programs. Revising the law and establishing testing and licensure procedures were joint efforts of faculty from the University of Florida, Miami-Dade Community College, and St. Petersburg Junior College.

To help the communication process, we need seminars. For example, we would like to be able to talk about administrative problems in allied health. How can we get together in a seminar? It isn't always courses we are looking for. It is communication; it is a seminar; it is understanding; it is support -- and not monetary support. How good it would be to share ideas. Send one of your instructors to us and we will begin an exchange of resources. Not money. We talk interdisciplinary communication. We even have a pilot program in which the last year for the nurse in a two-year program will be spent as part of a team composed of nursing and allied health students working together for patient care. If we can instigate this kind of teamwork at the two-year level, we certainly need to talk about it at other levels. How many of your areas have interdisciplinary courses? I'm not talking about the health sciences; I'm talking about clinical sharing. We don't have open communication on such things as the proposed two-plus-two programs, *up-coming workshops, core courses. We don't know what's going on.*

We need better communication about what is going on in the whole system. University educators need to know better what community colleges are doing, too. In one place in this state a university -- with hundreds of baccalaureate and masters students -- a licensed practical nurse program, a junior college program, and now a psychiatric program are all using one small community hospital for clinical experiences. How would you like to be a patient there? Is there something within that setting that we need to simulate? How can we do this? We need to think these things out together.

And is the clinical part holy? Or as we move in the direction of disease prevention and health education, what will the role of the hospital be? If the role of the hospital remains dominant, if the clinic is the Great God, then we will have difficulty educating large numbers of students through clinical experiences.

We may be neglecting other educational methods. I'm not impressed by the theory that a person can't teach somebody to care for people without having cared for them herself. Nevertheless, the university needs input from hospital persons -- the deliverers of services.

I think the study of liability insurance should also be included in allied health curricula.

At the last meeting of the American Association of Community and Junior Colleges and the Council on the Associate Degree in Nursing, the theme was "Allied Health and Nursing -- Do They Belong Together Administratively?" To me, a nurse, that's progress.

Licensure, accreditation, program approval are national problems -- they are our problems. Only together are we going to solve them.

Albert B. Smith III, Ph.D.

Assistant Professor of Education
College of Education
University of Florida

I entitled my brief remarks, "Consortium concept -- A model for more effective curriculum and instruction." I am thinking of a consortium not primarily as a task force that we could form today so university and community college faculty might work together, but as an educational program for students. Dr. Koch started me thinking about this yesterday. He talked about infusion of faculty, students, and health related practitioners. The traditional view of the consortium has been for colleges and universities, primarily private ones, to get together and share resources and personnel.

The first type of consortium I am envisioning would bring together high school students and faculty, college faculty, university faculty, health related practitioners, and community health care people to build an educational program. Perhaps we need a regional consortium, as well as consortia at the local level. Community colleges could form local consortia among the agencies and the individuals working with them.

The primary purpose of these consortia would be to establish what we have been talking about during most of the conference: a comprehensive community health care delivery system. And the consortia would be designed to help communities solve some of their health care problems. The problems could become the curricula for the health care programs, replacing the traditional course credit approach we have taken.

One question to be raised immediately is how to finance these consortia. As I listened to speakers these last two days, I heard them saying that private industry is interested in more comprehensive health care programs for their employees. It may be that each consortium, then, could enter into a contract relationship with a private organization which could assist their students and faculty in setting up more comprehensive health care programs.

A second cooperative effort might simply be to exchange faculty. Universities have been criticized recently for tenure systems that do not allow community resource persons in to work with students. This might be an opportunity for outsiders to become involved in university programs. They would be part of the community college programs, but they would move back and forth between the college and the private organization or agency needing the consultation or assistance.

I'm not sure what the geographic scope of our consortium might be. It seems as though the CAHIP program has provided some opportunities for coordination and has brought us together these past two days. It may be that we should build upon that base, using CAHIP resources to coordinate some of the consortium activities that may develop. Someone has mentioned the Inter-institutional Research Council (IRC), part of the Institute of Higher Education, and has suggested the possibility of its providing research services to community colleges. This may be another agency that could participate in our consortium.

How can we get started? I would suggest that we kick around the idea of a consortium today. That we think about this conference being the first meeting of such a consortium, and that we organize not one task force, but maybe three or four, to get some of the jobs done that we have been talking about the last few days.

In keeping with the consortium idea, I would like to look at a couple of suggestions made by speakers. Dr. Hamburg mentioned a program in which he went out with a group of students and faculty into rural communities.

That is the type of curriculum approach I propose here: we can form teams of resource persons to go out from our institutions. These teams would include students who would develop and assist industry, such as the rural group, and others from throughout the state.

I believe it was Dr. Hamburg who also mentioned the need for consumer information programs. Certainly a consortium could plan a uniform comprehensive information program for consumers. Dr. Mase talked about the need to survey people and to discover health care needs. Again, I think IRC, with its interconnections, could open to consortium participants both computer resources and the community colleges' resources for surveying community needs in the health care area. CAHIP could serve as a clearinghouse for educational materials. Paul mentioned earlier that we have a lot of tapes and instructional materials available. The tapes from this conference could, perhaps, be circulated among university and community college faculty in continuing education programs or in-service programs. They could also be used in the preservice curriculum. Dr. Perry talked of the need to examine our curricula. We may need a task force, as part of this consortium, to look at curriculum planning.

I asked a faculty member last night if he was aware of CAHIP's monographs on competencies in the allied health professions and he said he wasn't aware of the publication. We need to share more effectively some of the publications already available.

I think a consortium would provide the political clout that people seem to be looking for in this conference. A statewide or regional consortium would bring together all the local consortia to provide some force against the legislators, accrediting agencies, health commissioners, and others. We could present our programs and our ideas -- in a joint venture.

Dr. Ackell talked about field experiences of students in the University of Florida's physician's assistant program. I, too, have been involved in field experiences for future teachers and feel that as a consortium we could find new ways to involve students in community work. The consortium could also work to implement Florida health planning recommendations we are anticipating in the near future. As students work with community people, the community people get to know them better. Often, I think, jobs would develop out of that situation. I think that by developing consortia that focus on community problems we would avoid the program standardization that Dr. Koch mentioned, and we would be prepared for change -- for continual change.

Through consortium participation, I think we would have access to the resources needed to develop the new breed of personnel Dr. Kinsinger mentioned. Last year, the university had an in-service continuing education program with Edison Community College faculty. It was an example of an opportunity for us to visit and participate in each other's programs. As far as a consortium effort at exploring alternatives to present degree programs, our college is moving to reduce residency requirements, especially for students earning master's degrees. I hope we can arrange more internships for students. I think we can use Dr. Mary McCaulley in this consortium to do some more research on personality typology as it relates to health manpower. Research has shown that the type indicator can be a helpful way in identifying student learning styles and matching learning styles with faculty teaching styles and with learning experiences. In a recent book on alternatives to higher education, which I recommend to you, Ohmer Milton, University of Tennessee, says that the most needed research in the field of higher education today is a national study on student learning styles. Dr. McCaulley's work is making an important contribution to this field.

We may need a task force as part of this consortium just on the problem of articulation.

Finally, I would hope that the consortium would open up communication as this conference has done. Once we work together, either in solving community problems or in solving some of our inter-institutional problems, we can learn to appreciate each other and work together more effectively. So I hope you take this chance to explore the idea.

COMMENTS

Nancy Hartley

We have said we need communications. Actually, we have a means of communicating. Don't you already have a newsletter, the AHIP NEWS, that we could receive? We don't know what's going on.

Margaret Morgan

CAHIP does put out such a publication for allied health instructional personnel and we will see that you receive it.

Comment

Nancy Hartley mentioned modules. This is one way of teaching that implies a new way of utilizing facilities. We have had to go to modules in some of our specialty areas because we did not have the clinical facilities. If we go to a module approach, we can utilize one facility many more hours of the day. I think the junior college allied health people need guidance in the development of modules for some programs, particularly in nursing.

Comment

It is interesting to note that last fall throughout the United States a rather startling drop in enrollment of students entering community colleges and entering parallel university programs occurred. In a few places around the country, these have dropped almost half in one year and there has been an equally perceptible increase in students enrolling in occupational programs of various and sundry types, so that the balance which we had talked about a few years ago in a junior college, for example, 30/70, is now fast approaching a 50/50 balance. In Minnesota, for example, state college enrollment greatly decreased and community college enrollment slightly decreased and vocational enrollment increased greatly. This is happening in many places and reflects a change in public attitude.

Kenneth Skaggs

When the American Association of Junior Colleges first made thrusts into the occupational education fields in 1966, we found that about 13 percent of junior college enrollees were entering career programs initially. In 1972, a survey made by one university indicated that about 40 percent of the total enrollment in community and junior colleges across the country was initially in occupational education. Quite an increase when you take into account the fact that the population of two-year colleges increased tremendously. We now estimate about 1,300,000 students are enrolled in occupational education. This has served to bring the two-year colleges and the universities closer together. University personnel are beginning to say, "If this is the kind of students who are emerging, we had better take note of how we can work with community colleges." This is one of the reasons we are holding this series of workshops across the country. Several universities have established divisions for community college articulation -- whole departments working on inter-institutional relationships. The American Council on Education indicates that nationally, enrollment in four-year institutions and universities this past year dropped about six percent. Community and junior colleges, on the other hand, showed an increase of about seven percent, almost entirely in career education programs.

A SUGGESTION FOR CHANGE

Albert A. Canfield, Ph.D.
Vice President, Human Synergistics
Detroit, Michigan

I have always approached conferences with a sense of dread that, after all of the avowed openness and fellowship and concern and sharing of anxieties and feelings and problems, what we tend to do is disappear, then get back together a year later and decide that the problem certainly isn't any better, maybe redefine it a little bit and wait for another opportunity to discuss it in greater length.

I would like to suggest that maybe we are "beginning to start to commence," which is about all I think anybody can hope to have come out of a meeting of this kind.

We have touched on many issues about which we can do nothing, and very lightly on many issues that really are within our realm of influence. I'm particularly excited at the prospect that people will begin to accept some of the realities of life: That we do have some fairly intense inter-institutional competition, that we do have some rather horrendous hidden agendas, that we have some pretty well concealed covert evaluations of one another, that maybe some sense of trust and some sense of openness will ultimately come out so we can cope with them.

We have heard some alternatives as to how we can move ahead. I'd like to at least look at one or two of these.

It has been suggested that we could have a consortium of the institutions that are here. That has a lot of disadvantages. One of the disadvantages is that it's only partial representation of the people in the field. Another disadvantage is that others might consider it a bit presumptuous for us to begin to do things without having cleared with the other institutions. And there may even be people who feel that such action is premature. It seems to me, as opposed to the alternative of taking the bit in our own teeth and suffering the slings and arrows of having done something, we might well wait and hope someone else picks up the ball.

Or the alternative which looks most desirable is kind of a "que sera" approach, which means, in essence, "let it be" -- to let the dream be a dream, and maybe we ought to consider it later.

I'm always disturbed in that regard about the extent to which we are ready to wait until somebody else comes up with the bread. I think we must note in passing that this meeting -- which everyone says is long overdue and which is a great thing in that we are beginning to have dialogue on important issues -- did not occur until the Commonwealth Fund and the Kellogg Foundation said, "Here's some extra money." I really don't understand why it is we have to have resources from outside our own institutions to do the things it seems to be critical to do.

Now I recently decided to leave the University of Florida to accept a partnership in a consulting firm called Human Synergistics. The word "synergistics," for us, means just plain synergy, the phenomenon that means we can do things together better than we can do them individually. Synergy to us means two or more people doing together what no one can do by himself. When we get together and start talking, if we don't achieve a synergistic effect, there's no point in the discussion.

Accepting the challenge of taking some action is threatening. But the dangers of doing something are minimal compared to the risks of delay. Cautious, prudent indisposition to act and let others decide for us really bugs me.

I am troubled that we cannot seem to get together without outside funds. But I am going to suggest we take advantage of an outside agency, namely Kellogg, to try to find a way in which, through consensus and discussion, we can create things together that we can't create alone.

And it might be quite feasible to get something begun here today as a result of your good will and, I hope, open understanding and awareness of the problem, that would enable us to get South Florida, Florida International, Miami-Dade, and the other institutions of higher education ultimately involved in some kind of an activity that would in effect achieve an articulation of allied health education, not merely between you and me, but among all allied health educators, including the public schools which, we have recently experienced, have incredible problems in trying to staff and define curricula that feed into the community colleges. Although I might sound somewhat pessimistic, I really think the kind of warmth and the sincerity you can express and do express can be converted to something worthwhile, and that we don't leave the conference having simply reviewed the problem again, but in essence walk away, not waiting for Big Brother to do it for us, but doing it for ourselves.

A SUMMARY OF PROBLEMS, ISSUES AND CONCERNS

Margaret K. Morgan, Ph.D.
Director, Center for Allied Health Instructional Personnel
University of Florida
Gainesville, Florida

The conference described in these pages was organized to suggest possible directions of health care delivery as a basis for educational planning. Objectives included the identification of (1) trends in health care delivery, (2) educational resources which can be utilized in coping with those trends, (3) roles educators may play in educational planning, (4) a means by which some of these challenges may be accomplished.

Out of papers presented and discussions which took place in the two-day meeting, many problems, issues, and concerns emerged. Many of these are suggested below. The categories are not discrete. However, taken together, the items form a basis for educational planning for health care delivery.

The Future of Health Care Delivery

Forecasting the future of health care delivery is difficult if not impossible.

To know what will happen in the future we must go with prognostications based on what it appears will happen, not what has happened in the past or is happening in the present.

Health care must shift from emphasis on caring for the sick to emphasis on well-being and to education of the public about the care and maintenance of its health. Such changes will be slow in coming about.

Health care must be made more comprehensive to include large elements of preventive care and extended care. The delivery of comprehensive health care must be of a consistency and constancy which implies a system, or at least a more logical organization, than presently exists. Care must be readily available and reasonably accessable to all patients. The cost of such care must be financed in a fashion which makes it readily available to all.

The longer we persist in our spotty and many times inequitable distribution of fees-for-service-rendered, the longer we delay the equitable distribution of health care delivery.

A prepaid health care plan in which total care would be provided in return for one set annual fee would put a premium on wellness rather than illness.

A continuum of health care services has long been advocated, but to date little has been done to implement it.

More health manpower alone will not help the cost increases unless the delivery system is improved.

Hospitals will diminish in importance as major focii for the delivery of health care.

Educators of consortia of educational programs need to look at non-traditional health service areas and settings in which more emphasis will be given in the future.

If we want a means to encourage young people to work in rural and other isolated areas, we should try money.

Comprehensive health planning will be more effective if representatives of the various educational programs in a state can be encouraged to meet and work together.

Demands for health care services will increase. Medicare will grow in size and complexity -- a change which has great implications for allied health professions and the newer physician extender personnel. Labor unions and industry increasingly will render health care to their members. Government sponsored or subsidized health maintenance organizations will increase.

Changes coming about in our various professions are almost always forced from the outside and changes in the delivery system will probably be forced upon the professions from the outside, just as Medicare was forced upon the American Medical Association.

Health Manpower Utilization

The so-called crisis in the shortage of health manpower is nearing an end, at least as far as total numbers are concerned.

Allied health and nursing personnel -- non-physicians -- are ideally suited to provide the various services that constitute health maintenance. Eighty percent of what is done in primary health care today can be done just as well if not better by people less trained than the physician.

Rather than add new titles and create new health careers, we need to retrain and to learn how to utilize personnel we already have.

The system of health care delivery must change; if we are not preparing personnel who can adapt to those changes we are doing them a disservice. A strenuous, coordinated effort is needed to prevent creation of deadend jobs, over-specialization and training of non-employable personnel.

In evaluating health manpower requirements, market demand, not just need identification, must be known.

Extending and modifying the services which professionals provide will require technicians with a career-base preparation.

If we are to keep health care personnel happy and functioning successfully in the field, we are going to have to give them continuing communication and relationship with their colleagues.

At two extremes of a health manpower continuum are (1) the stereotyped employer looking for the unimaginative but steady worker -- he is the status quo seeker -- and (2) the educator teaching service roles, not as they are, but as he feels they ought to be -- he is the purveyor of unreality.

Program Development

It is easier for us to come up with new programs than to rethink, rework, revitalize some of the old.

Educators are hampered by licensing and certification problems in developing programs to prepare any kind of health related personnel.

We need to identify the real requirements for proficiency or success in a given field, realign the curriculum to match the requirements, and articulate the curriculum within the state's educational system.

We need to look at the role of the hospital in the future. Is the clinical experience holy? If the hospital remains dominant, we will have difficulty educating a large number of students through clinical experience.

Neither university nor community college programs have clearly identified goals, needs, purposes, or objectives.

Educational planning needs to be a continuous joint effort by instructors and practitioners.

Community junior college educators should look at ways their own curricula can reflect the concepts in health care delivery.

University educators, as well as health related professionals need to be taught how to use assistants.

Program planning should provide a means whereby community resource persons may work with students.

A task force should look at curriculum planning for the entire state. Particular emphasis should be placed on clinical training.

Included in the curriculum should be such concepts as third party payment and liability insurance.

Student Selection and Preparation

The screening of students for openings in educational programs remains a problem as applicants continue to far outnumber available spaces.

An exchange of students between programs, and the forming of interdisciplinary teams within a program, would contribute to the preparation of well rounded professionals.

In an age of accountability we do not have a record of our graduates, where they are working, how many have sought advanced training, how many are unemployed.

Maximization of Resources

It is difficult for educators to become change agents when the educational system is not conducive to change. Legislators and state board members are as reluctant to experiment as are administrators and faculty.

We are making a mistake if we continue to think of colleges and universities as institutions to keep people away from education rather than institutions for more and further education.

As a result of today's emphasis on accountability, tomorrow's educators will utilize technological developments to a greater extent than has occurred in the past.

Universities need to look into the possibility of offering certain rare educational experiences in communities not close to those universities, possibly in conjunction with a community college. These could be seminars for educators and/or allied health professionals.

Universities should reconsider residency requirements for graduate programs and should exempt community college faculty from the usual criteria for entrance into advanced education: The possessor of a baccalaureate degree and a record of successful work as a practitioner should be allowed to enter graduate school without the requirement of the Graduate Record Examination (GRE).

If the career development pattern evolves in which we can only provide beginning skills for the new practitioner, educators must somehow find ways to identify skills essential in beginning practice and then, ways to add additional skills as one climbs the ladder to further career development.

The larger task facing the health professions educator over the next several years will be the reeducation of currently practicing persons.

Much of the continuing education of the future will be interdisciplinary in nature.

Communication

Communication between educators of health related personnel in vocational, technical, and university programs is virtually nonexistent.

A need exists for sharing resources: money, people, and research.

We have too few models of health related professionals working together as a team, and of health related professionals and educators working together.

We need joint planning committees of personnel from universities, community colleges, vocational schools, and industry.

Articulation

Officially, an articulation agreement between junior and senior institutions exists, but a student who attempts to transfer finds almost no acceptance of the pre-university education he has had.

Educational institutions at all levels should assume responsibility for helping the student go as high as he wishes up the academic ladder he has chosen.

Credit for field experience is probably one of the most promising possibilities in education.

As this monograph goes to press a consortium is being formed to begin to find answers to questions and solutions to problems.

PARTICIPANTS

Edmund F. Ackell*
Vice President for Health Affairs
J. Hillis Miller Health Center
University of Florida
Gainesville, Florida

Jo Ann Ahlstrom
CAHIP Fellow
University of Florida
Gainesville, Florida

Herb Attaway
Dean, Technical Division
Lake City Community College
Lake City, Florida

Barbara J. Bradford
Physical Therapy Assistant Program
St. Petersburg Junior College
St. Petersburg, Florida

Polly U. Brown
Doctoral Student
University of Florida
Gainesville, Florida

William C. Bungert
Dean
Lake-Sumter Community College
Leesburg, Florida

Albert A. Canfield *
Vice President
Human Synergistics, Inc.
Detroit, Michigan

Louis D. Cohen
Chairman, Clinical Psychology
University of Florida
Gainesville, Florida

Arlene Cross
Hillsborough Community College
Tampa, Florida

Jesse J. DeFore
Professor, VTA Education
University of Florida
Gainesville, Florida

Gordon W. Denham
Instructor in Charge
Mental Retardation Program
St. Petersburg Junior College
St. Petersburg, Florida

George W. Depee
University of Florida
Gainesville, Florida

Anthony J. Dobies
Graduate Assistant
University of Florida
Gainesville, Florida

Arnold T. Duke
Consultant
Health Occupations Education
Florida Department of Education
Tallahassee, Florida

David M. Falleur
CAHIP Fellow
University of Florida
Gainesville, Florida

Robin M. Fellers
CAHIP Fellow
University of Florida
Gainesville, Florida

Dolores M. Filson
Publications Specialist, CAHIP
University of Florida
Gainesville, Florida

Norma P. Fisher
Associate Professor
Physical Therapy
University of Florida
Gainesville, Florida

Louis Folgueras
Chairman, Nursing Department
Valencia Community College
Orlando, Florida

Olive Galloway
Hillsborough Community College
Tampa, Florida

*designates conference speaker

Chris Gallups
Acting Director-Nursing
Lake City Community College
Lake City, Florida

William R. Gould
CAHIP Fellow
University of Florida
Gainesville, Florida

Elizabeth Gower
University of Florida
Gainesville, Florida

Paul W. Graham*
Dean of Academic Affairs
Palm Beach Junior College
Lake Worth, Florida

Joseph Hamburg*
Dean
College of Allied Health Professions
University of Kentucky
Lexington, Kentucky

Lowell C. Hammer*
Assistant Dean
Health Related Affairs
J. Hillis Miller Health Center
University of Florida
Gainesville, Florida

Nancy M. Hartley*
Specialist, Health Related Programs
St. Petersburg Junior College
Clearwater, Florida

Arline Haufler
Information Specialist
J. Hillis Miller Health Center
University of Florida
Gainesville, Florida

James W. Hensel
Chairman, VTA Education
University of Florida
Gainesville, Florida

James K. Hill
CAHIP Fellow
University of Florida
Gainesville, Florida

Elnora Holt
LPN Instructor
Seminole Junior College
Sanford, Florida

Alice C. Jantzen
Chairman
Occupational Therapy
University of Florida
Gainesville, Florida

Robert E. Kinsinger*
Vice President-Programs
W. K. Kellogg Foundation
Battle Creek, Michigan

Moses S. Koch*
Director, Health Care Project
American Association of
State Colleges and
Universities
Washington, D.C.

David S. Lindberg
Assistant Professor
Medical Technology
University of Florida
Gainesville, Florida

Darrel J. Mase*
Dean Emeritus
College of Health Related
Professions
University of Florida
Gainesville, Florida

Mary H. McCaulley*
Assistant Professor
Clinical Psychology
University of Florida
Gainesville, Florida

Carol McGuire
Instructor, Health
Occupations Education
North Florida Junior College
Madison, Florida

William A. Mellan
CAHIP Fellow
University of Florida
Gainesville, Florida

*designates conference speaker

Delmar R. Miller
Assistant Administrator
Health Occupations Education
Florida Department of Education
Tallahassee, Florida

Everett L. Mitchell
Administrative Assistant
VTA Education
Seminole Junior College
Sanford, Florida

Margaret K. Morgan*
Director, CAHIP
University of Florida
Gainesville, Florida

Lorraine R. Morton
Medical Technologist
University of Florida
Gainesville, Florida

Bernard V. Murphy
Information and Counseling
Division
Santa Fe Community College
Gainesville, Florida

Barbara Nash
CAHIP Fellow
University of Florida
Gainesville, Florida

Linda O'Brien
Instructor, Practical Nursing
North Florida Junior College
Madison, Florida

Robert P. O'Brien
Graduate Research Assistant
Clinical Psychology
University of Florida
Gainesville, Florida

Jason C. Outler
University of Florida
Gainesville, Florida

D. Frank Palmieri
Director, Health Division
Daytona Beach Community College
Daytona Beach, Florida

Ethel Pasternack
LPN Instructor
Seminole Junior College
Sanford, Florida

J. Warren Perry*
Dean
School of Allied Health Professions
State University of New York
Buffalo, New York

Dayton Y. Roberts
Associate Professor
Institute of Higher Education
University of Florida
Gainesville, Florida

Thomas C. Rogero
Dean of Academic Affairs
St. Johns River Junior College
Palatka, Florida

Jack Roquemore
University of Florida
Gainesville, Florida

Charles Sample
Dean of Career and Community
Programs
Valencia Community College
Orlando, Florida

Carl Sexton
University of Florida
Gainesville, Florida

Bert L. Sharp*
Dean
College of Education
University of Florida
Gainesville, Florida

Louise Shea
Instructor-Technical Nursing
Florida Junior College at
Jacksonville
Jacksonville, Florida

Kenneth G. Skaggs*
Specialist
Occupational Education
American Association of Community
and Junior Colleges
Washington, D.C.

*designates conference speaker

Albert B. Smith*
Assistant Professor, Education
University of Florida
Gainesville, Florida

Gary Spencer
Assistant Professor
Social Psychology
University of Florida
Gainesville, Florida

Marjorie Stephenson
Coordinator of R/N Program
Special Occupations Division
Brevard Community College
Cocoa, Florida

Howard K. Suzuki*
Dean
College of Health Related Professions
University of Florida
Gainesville, Florida

Karen I. Tyrer
Media Specialist, CAHIP
University of Florida
Gainesville, Florida

Ronald T. Tyrer
Graduate Student
University of Florida
Gainesville, Florida

Manuel Valles
Health Manpower Coordinator
Bureau of Comprehensive Health Planning
Florida Department of Health and Rehabilitation Services
Tampa, Florida

Wilfred W. Wagner
Chairman
Special Occupations Division
Brevard Community College
Cocoa, Florida

James L. Wattenbarger*
Director
Institute of Higher Education
University-of Florida
Gainesville, Florida

Edward B. Wiley
Associate Dean of Academic Affairs
St. Johns River Junior College
Palatka, Florida

Paul P. Williams
President
Lake-Sumter Community College
Leesburg, Florida

M. Ruth Williams
Chairman, Medical Technology
University of Florida
Gainesville, Florida

Hazel Womble
Nursing Faculty
Florida Junior College at Jacksonville
Jacksonville, Florida

*designates conference speaker

ACKNOWLEDGEMENT

The editors of this monograph wish to thank persons who participated in the conference and others who worked so diligently to produce the proceedings.

Gratitude is owed those who presented papers and those who took part in discussions.

Especial thanks are due Al Canfield who first said, "Let's see if we can identify some of the problems," then assisted in planning the conference; Ken Skaggs, without whose assistance the meeting could never have taken place; Darrel Mase, who provided continuity for the meeting; Mary McCaulley, Bob O'Brien, and the staff of the Typology Laboratory for making the tape/slide presentation possible; Karen and Ron Tyrer for recording the meeting; Janie Garrett for transcribing the tapes; Claudette Pridgen, who typed the manuscripts, humoring finicky editors to the point of, in some instances, typing a section many times; Tony Dobies, who handled production from completion of manuscript to distribution of the publication, and Wanda Wilson and Chuck Broward for assistance in assembling the monographs.

Dolores M. Filson
Publications Specialist

Margaret K. Morgan
Director
Center for Allied Health
Instructional Personnel (CAHIP)